

Manufacturers Record

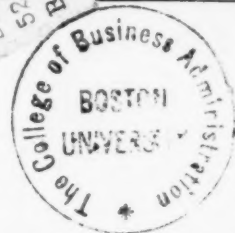
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Baltimore, Md.
NOVEMBER 22, 1928

Thanksgiving Day.



Unto Thee, Giver of all good and perfect gifts, Creator and Preserver, Omnipotent, Omnipresent, Omniscient One, would we, as individuals and a nation, bow before Thy throne with hearts full of gratitude for Thy innumerable blessings. Through the past Thou hast led our country and crowned it with blessings beyond our power to comprehend or to enumerate.

As we contemplate Thy boundless mercies and Thy guiding hand in shaping our nation's life, we would lift up our hearts in profound gratitude.

Grant unto us, Thou Almighty One, the vision to see that these blessings are to be used to serve humanity, to advance Thy cause on earth, to help hasten the day when Thy kingdom shall come and Thy will be done on earth as in heaven, or else they will prove a curse.

As the people of this country have been called upon by the President to assemble in their places of worship and give thanks unto Thee, Almighty God for all Thy tender mercies and loving kindness, it becometh us as individuals to lay aside the usual business cares, or pleasure-seeking opportunities, and devote that day to rendering thanks unto Thee in an expression of our heartfelt gratitude for Thy infinite love which has rested upon our country, and for Thy guidance which has brought us thus far, apparently chosen by Thee to lead the world in spiritual as well as in material advancement.

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Manufacturers Record

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BALTIMORE, NOVEMBER 22, 1928.

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Hoover's Visit to South America a Great Move for Increased Friendship and Business.

THE promptness and vigor with which Mr. Hoover is attacking one large group of the international problems that will face him in the Presidency is thoroughly characteristic of the man. It is reminiscent of the account given by the late Walter Hines Page, Ambassador to Great Britain, of the conference with Mr. Hoover during which he asked him to undertake the unique job of feeding a nation in the midst of a great war. The little group had been discussing the great and unprecedented powers that such an administrator would require and Mr. Page, turning on the American engineer, said:

"Hoover, you're it!"

Mr. Hoover sat silent a moment. Then he glanced at his watch and without a word he left the room. When he returned he accepted the job, and Mr. Page asked him to account for his mysterious exit. Mr. Hoover explained that he had had just an hour before closing time of the Chicago grain exchange, and he had cabled on his own authority for several million bushels of wheat. Having set his first consignment of food supplies moving, he then sat down to confer upon the details of his powers and responsibilities.

Now, having been elected to the Presidency, he sets out in his own direct fashion to become acquainted with the one continent in which he has not worked; and to make friends, as the future head of the nation, with a group of countries with which our relations have not always been as harmonious as we could wish.

Most friction, international as well as personal, originates in a failure of one or both parties to understand the opposite party's point of view. When reasonable men, or reasonable nations, come together in friendly fashion to talk over their problems, satisfactory solutions can usually be found. Mr. Hoover loves to get a number of men together in a room and lead them to talk their problems out to a settlement. We can imagine him sitting down in friendly conversations with the leaders of the countries south of us, and reminding them that our jingo press no more represents the heart of the United States than their own jingo papers represent the true feelings of their countries. We can imagine him telling them something of his desire and his hope for friendly relationships, and assuring them that our size and wealth is no menace to their peace and security because we have no imperialistic aims and our people would tolerate none. His public utterances should give the peoples he visits a new light on the United States. No more authoritative spokesman for the sentiment and the purposes of this country could be found

than the man whose remarkable achievements in guiding American business into channels of self-government formed one of the stepping stones to his unprecedented victory in the election. Mr. Hoover's clear mandate from the American people, his direct methods and his reputation for integrity, will add force to his words, and his visits should result in much more friendly feelings toward us among our Southern neighbors.

From the other point of view, not one of our presidents has ever had first-hand information of Central and South America. Not one has had the background of world-wide experience to give him a ready grasp of the points of view of foreign countries. And not one has had the close contact with our foreign trade that Mr. Hoover has had in the Department of Commerce, to give him beforehand the comprehensive knowledge of the industrial and commercial activities of those countries. It is easy to believe that Mr. Hoover, with his intellectual capacity and his remarkable background, will leave those countries with such an understanding of their problems and their potentialities as no other President and no Secretary of State has ever possessed.

Furthermore, we may feel sure that from now forward Latin America will have no cause to resent the mediocrity of the diplomats appointed to her capitals as compared with those we send to Europe.

Beyond the fact that mutual understanding and good will should greatly facilitate our diplomatic negotiations with those southern neighbors, and render possible the settlement in record time of whatever problems may arise between our country and any of those to the South of us, there is also the important one of international trade. In 1927 we exported goods to the value of \$5,056,085,000, and Latin America imported goods valued at \$2,351,103,000, of which \$845,700,000 came from this country. In other words, that trade territory buys from the United States about 36 per cent of all its imports, and these purchases amount to 16.7 per cent of all the goods we export. Conversely, in 1927 we imported \$4,420,638,000 worth of goods, while Latin America exported \$2,894,792,000 worth, of which we took \$1,018,900,000. That is, we buy 35.2 per cent of all Latin America's exports, a quantity that amounts to 23 per cent of all our imports. Therefore it is evident that Latin America is one of our large customers and, since 36 per cent of all its imports come from this country, we are its largest single source of supply of the things it wants and does not produce, while the converse of the relationship is equally true; we are Latin America's largest customer and that territory is an indispensable source of supply for us.

The importance of Latin America in our foreign trade is

made clearer by the following tabulation of our commerce with that trade territory and with European countries.

| Our 1927 Exports to | | Our 1927 Imports from | |
|---------------------|---------------|-----------------------|-----------------|
| Latin America..... | \$845,700,000 | Latin America..... | \$1,018,900,000 |
| United Kingdom... | 840,100,000 | United Kingdom... | 357,900,000 |
| Germany | 481,000,000 | Germany | 200,600,000 |
| France | 228,700,000 | France | 167,800,000 |

Our share in the imports of that great trade territory represents a growing percentage of the total. The following tabulation of the origins of the imports of the principal countries in the group tells the story:

| Imports of: | From | Per cent of Total | |
|-------------|---------------------|-------------------|------|
| | | 1913 | 1926 |
| Argentina | United States..... | 14.7 | 24.7 |
| | Belgium | 5.2 | 4.8 |
| | France | 9.0 | 7.4 |
| | Germany | 16.9 | 11.4 |
| | Italy | 8.3 | 9.0 |
| | United Kingdom..... | 31.0 | 19.3 |
| Brazil | United States..... | 15.7 | 28.7 |
| | France | 9.8 | 6.3 |
| | Germany | 17.5 | 10.6 |
| | Italy | 3.8 | 3.5 |
| | United Kingdom..... | 24.5 | 21.2 |
| Chile | United States..... | 16.7 | 32.7 |
| | Belgium | 4.7 | 5.1 |
| | France | 5.5 | 4.2 |
| | Germany | 24.6 | 12.1 |
| | United Kingdom..... | 30.0 | 17.2 |
| Mexico | United States..... | 50.6 | 70.5 |
| | France | 9.5 | 4.6 |
| | Germany | 13.1 | 7.4 |
| | United Kingdom..... | 13.5 | 7.4 |

Our exports to Latin America are made up largely of those manufactured products we turn out in such immense quantities, such as machinery in wide variety, typewriters, motor trucks, buses and passenger automobiles, tires and accessories, electrical machinery and apparatus, cotton goods, boots and shoes, lard, flour and a variety of other material. From Latin America we take in return hides, furs, wool, crude petroleum, coffee, bananas, cocoa beans, nitrates, copper, manganese ore, crude rubber, flaxseed and a few chemicals. In other words, Latin America produces enormous quantities of commodities, mostly raw materials, that we do not produce or which we produce in insufficient quantities, while we in turn manufacture in immense variety and quantity, commodities that they need. We are each the natural customer of the other to a much greater degree than we are competitors. This point is illustrated by the accompanying tables

OUR CHIEF EXPORTS TO LATIN AMERICA 1927

| | |
|-------------------------------------|---------------|
| Lard | \$21,030,000 |
| Boots and Shoes..... | 5,339,000 |
| Corn and Wheat (chiefly Cuba)..... | 4,140,000 |
| Flour | 18,935,000 |
| Meats (Cuba)..... | 4,521,000 |
| Eggs and Dairy Products (Cuba)..... | 2,349,000 |
| Autos (all kinds)..... | 71,875,000 |
| Tires and Accessories..... | 12,081,000 |
| Industrial Machinery..... | 40,825,000 |
| Electrical Machinery..... | 10,472,000 |
| Agricultural Machinery..... | 18,190,000 |
| Tubular Products..... | 12,928,000 |
| Iron, Steel, Tinplate..... | 12,233,000 |
| Railway Rolling Stock..... | 4,952,000 |
| Manufactured Cotton..... | 37,502,000 |
| Petroleum Products..... | 31,965,000 |
| Total | \$309,437,000 |

OUR CHIEF IMPORTS FROM LATIN AMERICA 1927

| | |
|----------------------------------|---------------|
| Hides | \$41,150,000 |
| Wool | 12,754,000 |
| Tomatoes (Mexico)..... | 3,207,000 |
| Bananas | 25,417,000 |
| Coffee (Brazil) | 256,041,000 |
| Chicle (Mexico)..... | 4,850,000 |
| Sisal (Mexico)..... | 13,072,000 |
| Crude Petroleum..... | 76,971,000 |
| Petroleum Products (Mexico)..... | 13,867,000 |
| Sugar and Cane..... | 216,360,000 |
| Tobacco | 23,681,000 |
| Flax Seed (Argentina)..... | 32,853,000 |
| Cocoa | 16,629,000 |
| Crude Rubber..... | 10,122,000 |
| Copper | 54,634,000 |
| Lead (Mexico)..... | 15,368,000 |
| Manganese Ore (Brazil)..... | 1,585,000 |
| Iron Ore..... | 3,060,000 |
| Nitrates (Chile)..... | 29,459,000 |
| Total | \$851,080,000 |

showing roughly the values of a number of the principal commodities exchanged during 1927.

Here is a relationship that should draw us closely together; and one that should prove mutually profitable with closer and more harmonious relations. There is a real and practical connection between popular good will and trade. If the people of a foreign country experience a great increase in their regard for ours, their preference for American styles, customs and commodities speedily makes its force evident in our exports.

Latin America can readily afford to buy more heavily from us in future than in the past; first, because the balance of trade between us has always shown a large margin in its favor; and, second, because of the enormous possibilities for growth there and the rapid rate at which the territory as a whole is progressing. The foreign trade of Argentina is roughly nine times as large as it was in 1900; that of Bolivia, about four times; that of Brazil, nearly three times; of Chile, two and one-half times; of Colombia, ten times; of Costa Rica, three times; of Cuba, nearly four times, in spite of the fact that it is now only about 40 per cent of the peak in 1920 when sugar exports and prices soared highest; Guatemala, four times; Honduras, six times; Nicaragua, about three and one-half times; Paraguay, nearly three times; Peru about four and one-half times; Uruguay, about three times; and Venezuela, seven times.

If Mr. Hoover at this time can establish, and can maintain more cordial relations with our Southern neighbors, the foundation should be laid for the continuation of such relations long thereafter. Mr. Hoover is coming into office at the beginning of a period of far closer contact with those countries by air and by ether, than has been possible in the past. Except Canada, they are our nearest neighbors. In their youthfulness they are close akin to us in spirit; and in their vast undeveloped territories they are now in the stage through which our western states only recently passed. Their aggregate area of 7,881,610 square miles is 2.6 times ours, while their total population of about 73,000,000 is only 61 per cent of ours. The density of their population, 9.27 per square mile, is less than one-fourth of ours now, or about what we had in 1856 or 1857, with 28,400,000 people, but due to the enormous advances made since then in science, engineering and transportation, their ability to prospect and to develop their resources is far ahead of anything we knew in 1856.

We are confident that the bold and unusual move of our President-elect will prove to be a step of immense consequence. Especially will the Southern region of the United States follow the results of Mr. Hoover's visit to Central and South America. It opens up vast possibilities of great significance to the whole business South. This section with its rapidly expanding industrial development, with its increasing trade with Latin America is in a favored position geographically. Commerce between Southern ports and those of the countries to the south of us is now on a large scale and growing. Florida has been for some years connected by rail and ferry with Cuba and within a short time an over-seas railway ferry service will begin operation between New Orleans and Havana. Communication by air is soon to be a reality when the air terminals now nearing completion at Miami will be operating, linking up Cuba, the service later to extend to other southern countries. With the building of contemplated highways and with the establishment of airways leading through the Southern states to Central and South America the whole South will secure further advantages in the increased trade with Latin America which is sure to follow.

Furthermore, the MANUFACTURERS RECORD believes Mr. Hoover's trip to be a significant forecast of presidential activities of a very unusual sort, leading to a degree of substantial and lasting prosperity such as the United States has never before known.

Chamber of Commerce of the United States Should Meet in the South.

MUCH interest has been created by the suggestion of the MANUFACTURERS RECORD some weeks ago that the United States Chamber of Commerce should hold one of its annual conventions in the South. As the 1929 meeting place has been selected, those Southern cities with adequate facilities should lose no time in presenting their invitations for the 1930 meeting. Information comes to us that individuals and organizations have begun an active campaign to secure this great business gathering. Concerted, convincing effort will be required on the part of the individual city which wins the honor of entertaining the convention, for many Southern cities can make a strong appeal.

There are two main reasons why the 1930 meeting of the Chamber of Commerce of the United States should be held in the South:

First, because in the South lie not only large and growing markets, but also the nation's greatest potentialities for building new industries on the raw materials that industry wants, and the men who make up the membership of the national Chamber of Commerce, being leaders in nearly all lines of industry and of commerce cannot afford to overlook any opportunity to visit the South and study its resources—material and human—and its business opportunities at first-hand.

In the South occur deposits of iron, coal and limestone sufficient to meet any demands that can be made upon them for generations yet to come; the finest kaolins, suitable for ceramics, paper-making and rubber manufacture lie in beds that centuries of use will not exhaust. Salt, the basic raw material of large and growing chemical industries and indispensable in many process industries, occurs in quantities that defy calculation. Soft coal has been mentioned in connection with iron and steel; soft coal as the basic raw material in huge chemical industries has nowhere near realized its potentialities, to say nothing of its growing importance as a heating unit when used in connection with modern equipment, such as systems for burning powdered coal. What the future may hold for the low-temperature carbonization of coal, the extraction of gasoline, oils and other chemicals and the utilization of the residual coke as a smokeless fuel, only the future can reveal; but that great developments are ahead, there seems little doubt. As the raw material for the capture of atmospheric nitrogen and therefore, as a basic raw material of a future fertilizer industry, coal is already well established. There is found a great variety of mineral raw materials—bauxite and other clays, building stones, and ores, too diverse to mention, with quantities of the less known minerals available. Agriculture, the cultivation on immense scale of products for industry such as cotton, tung oil, sugar cane, and many fibres, flourishes luxuriantly.

Coal, again, as a source of steam power; rushing streams, some of which are already driving turbines and sending their tireless energy over hundreds of miles of inter-connected high tension lines, while other streams are waiting to be harnessed; oil and natural gas—these furnish the driving power, ample and dependable, for all the factories that the energy and ambition of man can build. On the farms of this section live the labor, as yet largely untrained but eager, capable, and wholly unspoiled by the un-American doctrines bred in European monarchies, to man the industries as they develop.

All these facts have been described by the MANUFACTURERS RECORD, times without number, but they need to be reiterated that their significance may be more deeply impressed on the

people of the country. No man by reading of them can grasp their true significance as he can by standing at some designated point in the South, and being told that:

"Among those hills live the farmers whose sons and daughters are waiting for jobs in your factory. Down that gorge comes the stream that will drive its wheels; under your feet lies an inexhaustible supply of the raw material on which you depend; between the hills there, and there and there, wind the railways that will carry your finished products to the great and growing markets all about you. Yonder are modern highways and fast developing air lines and over there are improved waterways."

The leaders of the enterprises of this country cannot afford to overlook any opportunity to study at first-hand the natural and developed wealth of the South in its possible application to their particular interests.

The second reason is that the South, endowed with these resources, must teach the nation to appreciate them. No man who has ever attended an annual meeting of the United States Chamber of Commerce, or who has studied a list of those attending, needs to be told why the South should make every effort to bring such a gathering to its midst. That particular part of the South that is successful in securing the meeting will have an unexcelled opportunity to expound its advantages to the men who are daily guiding the destinies of great business organizations.

The Chamber of Commerce of the United States will consider next spring where its 1930 meeting should be held; it will decide a year in advance. There should be no delay in starting preparations for a convincing invitation.

AMERICAN PRODUCTION OF CHEMICALS LESS THAN CONSUMPTION.

IN 1927 our production of chemicals was \$2,278,000,000, our exports were \$184,133,000, and our imports were \$198,903,000, states the "Made In U. S. A. Bulletin" of the American Trademark Association. In other words, we consumed \$14,770,000 more than we produced. Our production, therefore, figures out at 99.4 per cent of our consumption. This summary includes hundreds of products as dissimilar as sulphuric acid and perfumes, many of them of fundamental importance to our peace time prosperity and vital to defense in time of war.

This development was forced upon us by the war and is therefore distinctly a war gain. The crisis from which it sprang is ample evidence of its importance, and unless we are actually as short of memory as we are often accused of being, we will not soon forget that fact. Germany has regained her pre-war dominance of the chemical industry in Europe, and is the leader in the effort of the nations to wrest from us much of the market we captured while European industries were still war-crippled. While, of course, the burden of responsibility for meeting foreign competition all over the world is upon the leaders of the industry itself, yet a very real share rests with all intelligent Americans.

Our great dye industry, which grew mighty in the protection of a tariff wall, proved itself able to continue aggressively when that wall was lowered. Many another branch of the industry has flourished behind such protection, while others have struggled for a bare existence and died untimely deaths because of a lack of it.

An immense amount of foolishness is talked about our

tariff policy. The heart of the matter is that our greatest market is our home market, that our home market is made up in the final analysis of individuals, most of whom are wage or salary earners, and that unless our industries keep running so as to pay the wages and salaries these workers depend upon, our great domestic market is dull. It is of little advantage that we may buy imported goods for a little less, if the money leaves the country and American workers are thrown out of their jobs. Under such conditions too many of us have no money with which to buy the cheaper foreign goods. We must constantly guard our essential chemical industries with adequate protective tariffs.

PLENTIFUL CROPS IN SIGHT THIS THANKSGIVING SEASON.

FAVORABLE weather has facilitated the harvesting of late crops and, according to the Department of Agriculture, damage from freezing has been less serious than usual, with the exception of an early frost in much of the Central and Western corn belt. Rice, sweet and white potatoes, cotton, beans, peanuts, sugar beets, apples, pears, oranges, grapefruit and grapes all indicate yields slightly above expectation.

Combining all crops, the yields per acre, reports the Agricultural Department, have been 3.4 per cent above average yields during the past 10 years. This favorable showing, while chiefly the result of good weather conditions—although in the case of corn, potatoes, hay and some other crops the larger yields are partially the result of increasing use of better varieties and better cultural methods—indicates that the farmers of the country are beginning to do their part toward aiding in a solution of the agricultural problem.

Of the country's principal crops, corn production is estimated at 2,895,449,000 bushels; wheat 903,865,000 bushels; oats 1,452,966,000 bushels; grain sorghums 150,573,000 bushels; white potatoes 465,651,000 bushels; peaches 67,875,000 bushels; peanuts 861,185,000 pounds; tobacco 1,346,566,000 pounds, and cotton 14,133,000 bales. All show increases over the 1927 output, as well as the five-year average crop production of 1922-1926. In other crops—the sweet potato production of 81,340,000 bushels for the country; tame hay 92,688,000 tons, and the rice crop of 40,422,000 bushels, as indicated for 1928, while these were less than the production of the previous year, they were in excess of the five-year average output of 1922-1926. The total apple crop of the country this year, estimated at 183,309,000 bushels, is larger than that of 1927 but below the average production of the five-year period 1922-1926.

In a comparison of the 13 principal crops of the South, production in 1928, as compiled from the November report of the Department of Agriculture, shows increases over 1927 in wheat, oats, grain sorghums, white potatoes, peanuts, cotton, tobacco, peaches and apples. A tabulation of these principal crops for the South as a whole, giving the November 1 estimate of production for 1928, the final estimate of 1927, and the five-year average output, 1922-1926, is as follows:

AGGREGATE PRODUCTION OF SOME OF SOUTH'S PRINCIPAL CROPS.

| Crop | Average 1922-1926 | Final 1927 | November 1 estimate, 1928 |
|-------------------------|----------------------|---------------|------------------------------|
| Corn (bu.) | 823,286,000 | 887,091,000 | 811,558,000 |
| Wheat (bu.) | 133,393,000 | 100,833,000 | 132,435,000 |
| Oats (bu.) | 166,489,000 | 142,052,000 | 159,845,000 |
| Grain sorghums (bu.) .. | 79,848,000 | 93,326,000 | 103,875,000 |
| Rice (bu.) | 30,198,000 | 35,379,000 | 32,126,000 |
| Potatoes (bu.) | 60,874,000 | 74,185,000 | 93,374,000 |
| Sweet potatoes (bu.) .. | 73,760,000 | 87,525,000 | 74,244,000 |
| Peanuts (pounds) | 671,247,000 | 806,990,000 | 861,185,000 |
| Tobacco (lbs.) | 1,132,906,000 | 1,063,686,000 | 1,167,708,000 |
| Cotton (bales) | 13,284,000 | 12,696,000 | 13,769,000 |
| Peaches (bu.) | 22,462,000 | 14,132,000 | 26,953,000 |
| Apples (bu.) | | 21,833,000 | 48,162,000 |
| Tame hay (tons) | 15,272,000 | 18,217,000 | 16,307,000 |

MORE PROFITABLE COMPETITION, LESS PRICE-CUTTING.

THROUGH deliberations and conclusions at its convention at Biloxi, Miss., last week, the American Institute of Steel Construction falls into step with other great industries in a determined movement to stamp out the practice of unreasonable price-cutting and to return to the practice of profitable competition on strictly businesslike lines. Like the cotton textile industry, the sheet steel industry, the cement industry and other producing agencies, the steel construction leaders have realized that profits do not depend necessarily on the volume of sales, and that reckless price-cutting in contests for orders injures each industry as a whole, as well as its component members.

And not without interest in discussion of this topic was a defense of the purchasing agent, who heretofore has been pictured as largely the instigator of the price-cutting practice. As sketched by L. F. Boffey, editor of *The Purchasing Agent*, the representative who does the buying is not the responsible cause, for the buyer deprecates the practice as strongly as do the men from whom he buys. Indeed, it may seem that Mr. Boffey goes somewhat to extreme in crediting the purchasing agent with sentiments almost altruistic in their nature. Not only is the purchasing agent "a firm advocate of price stabilization," he says, but also such agent is genuinely concerned that the manufacturer shall make a profit on his sales. The reason for this friendly interest is explained in a statement that the purchasing agent wishes to maintain his purchase market, which would be curtailed by the failure or retirement of concerns which operated on a losing basis.

To most observers it may appear that the establishing of a price rests with the seller, rather than with the buyer—that is, assuming that business is done on really businesslike lines. In some unusual situations, of course, a concern may find it better business to dispose of certain stock at a loss, rather than carry it; but under normal trade conditions, the vendor is the party to establish the price, based on production costs, overhead and other charges, plus a reasonable margin of profit. And the manufacturer is no more bound to cut his price to a buyer's figure than the purchaser is obliged to buy an article which he cannot afford. If a seller and buyer cannot agree on a price, that is unfortunate for both—but in the last analysis, it is merely an everyday incident in every business.

At all events, manufacturing industries now seem to take this view. For a long time, they have been engaged, in their respective industries, in a mad scramble for business. Incited by the volume of production, they have fought among themselves for an equal volume of sales. Prices, as has been openly stated at many conventions, have been cut in reckless fashion; sales volume has been the one end in view. To such extent, indeed, has this evil developed that the remark of a cotton buyer to a seller has become a classic: "When you fellows are through cutting prices, I'll talk business with you; but I'd be a fool to buy in this market." The period of "profitless prosperity" inevitably developed.

Now that Industry has grasped the fact that volume does not always spell profit, it has undertaken the remedy for conditions in really constructive fashion. For one thing, it is calling a halt to price-cutting and has turned to sane business practice. Faced with a great "curve of productive capacity," it plans to extend the radius of "the curve of consumptive capacity." Through their appropriate organization agencies, great industries now are striving to broaden greatly the circle of demand for their respective goods. The cotton

manufacturer, through chemical research and trade development, is enlarging the market for textile goods. The cement manufacturer is devising and proclaiming to the purchasing public new uses for his product. Steel men in every line are seeking and finding and advertising new uses for steel of every kind. And the constant development of new consuming industries and demands accelerates their progress.

No better plan could be imagined. The consuming capacity of the American people seems to be almost without limit. There is a potential market for every possible kind of product, and if there are more products than can find markets, or more of any one product than its market can absorb, it assuredly is possible through American ingenuity to develop new markets or to expand existing markets.

No more substantial reinforcement than the American Institute of Steel Construction well could have been enlisted in the great movement for the stabilization of industrial prices on a basis of reasonable and legitimate profit.

COMMUNITY RECREATIONAL CENTERS BUILD BETTER CITIZENS.

INSPIRATION for Youth and encouragement for Maturity were voiced recently by P. A. Myers, president of the F. E. Myers & Bro. Company of Ashland, Ohio, a great industrial concern, in presenting a 10-acre outdoor recreation center to the Young Men's Christian Association of that city. The play center is valued at \$55,000 and is the largest gift to the Ashland Y. M. C. A. in its history.

"I have long cherished a desire to give to the youth of Ashland a permanent playground—a perpetual legacy to the Spirit of Youth," said Mr. Myers at the dedication ceremonies. "I believe in giving the boy a chance to play and I believe in the man who plays. Outdoor play gives a boy great advantages for physical development that makes for a sound mind in a sound body and teaches him, through association with his playmates, fundamental principles which bring success in the game of life. I believe in the man who plays, who can retain that enthusiastic spirit of the boy in his dealings with his fellows, who plays the game of life with an optimism and courage that strive to overcome obstacles."

William Butterworth, president of the Chamber of Commerce of the United States, recently said: "Industry is generally alive to the bearing recreational opportunities have on the location of its factories." In the past two years, he added, five out of six industries which were looking toward a Pennsylvania town asked: "What park and public recreational facilities have you?" and an industrial plant asked of an Indiana chamber of commerce: "What recreation facilities are there for our employes, who will number 900, of whom 250 play golf?" He concluded:

"When the various economic advantages of recreation to the municipality, the taxpayer and the property owner, industry and all of us as individuals are fully recognized, our citizens will not longer delay in bringing their programs to the highest standards of efficiency."

All of which the South may do well to ponder. There are many fine fields for play, throughout the South, provided by municipalities, by textile and other industrial concerns, and by private donors; there cannot be too many such recreational centers, and for girls as well as boys and men. Southern cities should study this situation with the view of planning for adequate breathing spaces within their limits as future growth makes living conditions more crowded in the downtown area. It would be money well invested in the protection of the health of the community. Incidentally, the value of ground in every city in the South is increasing almost daily, and such investments may well be made while good opportunity is open.

STYLE AND DESIGN FACTORS IN HIGH PRESSURE SALES.

SO important has the element of style and design become, that it is now one of the most spectacular features of the great evolution under way in business practices. In some lines, through the worship of the fetish of rapid style changes, the stability of whole industries is threatened unless wisely controlled, while in other lines it has been their salvation in reviving and creating trade. Most instructive information on the subject has been compiled and published in pamphlet form by the Policyholders Service Bureau of the Metropolitan Life Insurance Company of New York. The facts are presented through a symposium giving the views of some of the foremost industrialists and business organizations of the country.

As may be surmised, automobile manufacturers are emphatic in stressing the present day value of style and design as a sales factor. Likewise, in the cotton goods industry, style, design and price are the major selling factors.

The symposium develops the fact that style and design have entered such prosaic businesses as roofing materials. A few years ago in this industry, color counted very little to the public, while style and design were negligible factors. The situation today is entirely changed. First, there came a demand for better designs and in the last three years there has been an intensive demand for colors, so that it is said one of the greatest selling arguments is the color of the material.

The Ruberoid Company, one of the country's well known roofing makers, is manufacturing today over a hundred different designs and colors in roofing material. While this presents a tremendously difficult manufacturing problem, the sales department is continually calling for more.

Under other heads, more or less strictly utilitarian in their use, is found a demand for colors, style and design in stoves, refrigerators, washing machines, vacuum cleaners, kitchen sinks and other articles.

Furthermore, the pamphlet, in outlining percentage of production devoted to new styles and designs, states that it may be well to keep in mind that there has been, first, a tendency to devote an increased percentage of production to new designs and styles, and second, the rapidity with which styles are being introduced is constantly on the increase. For instance, a manufacturer of lace states that 99.9 per cent of his production comprises new style and design; a hosiery company reports that there is no such thing as staples today in its line; one shoe company has 70 per cent of its materials staple and semi-staple, with only half of its patterns staple; 75 per cent of the production of one glass manufacturer is devoted to new styles and designs; 40 per cent of the production of a paper manufacturer is similarly given over. Even in the production of underwear, drastic style changes as well as new materials have entered into the picture.

A note of warning is sounded in the symposium by some industries, for it is pointed out that not only is an increasing proportion of production being devoted to styling of merchandise, but the swiftness with which new styles succeed each other is being increased. A large merchandising establishment calls attention to the fact that while styles and designs are being constantly developed in these days of high pressure selling and rapid obsolescence of merchandise, new styles and designs have to be produced continuously. The company tries to limit the introduction of new designs by definite seasons, but often seasons are divided into half seasons and in some lines it develops that ideas are being brought out constantly with no reference to seasons at all.

In fact, an increasing number of manufacturers are alarmed at the rapidity with which new styles and designs are produced. From which it may be inferred that profits from style and design changes can only be had after wide investigation and study and through the intelligent use and proper application of such practices.

French Moderation Promotes Happiness.

Paris, France, October 24.

Editor Manufacturers Record:

I was much interested in the article in the *MANUFACTURERS RECORD* by Edwin C. Eckel, entitled, "Life in Paris: A Study in Economics," and I can readily see how true it is in many respects. The fact of France having no natural resources was an influence I had not thought about, except in an indefinite way, but one thing impressed me greatly: Of the 2,000,000 people who live on about \$800 a year, there is to be found no unhappiness. They seem to be always happy! I see many of these on this side of the river. They all seem to be too busy to growl, and all have their savings packed away in a jar or in their stockings.

There is a restaurant around the corner from my abode, which I went into once, just to see what it is like. There they can get a full meal, soup, meat and vegetables for about eight francs, or 32 cents. They usually take this in the middle of the day, and their suppers at home usually consist of soup, a cereal and sweet or fruit and wine. They have learned how to live on little and are a happy wholesome race. Perhaps the heavy meal in the middle of the day and a light supper gives for health. I would give anything to be as strong and healthy as the French women of my age appear to be. One seldom sees glasses on the older people and yet many of the women do the finest sort of embroidery. Our extravagances are unknown here and a franc saved is a franc earned.

We must not forget that prices of the necessities are kept very low. The Government raised the price of bread a few years ago and the disturbance was so great they were obliged to lower it again. Prices are much, much higher than when I was here before the war, but wages for the French have gone up too, although we consider them extremely low, but for the French it is a living wage. The working people do not have automobiles or victrolas, but they have free concerts all the summer months, free galleries, free gardens, all beautiful, and their culture is far beyond that of our working classes, with their jazz and automobiles. There is a poor class which we do not have in Baltimore, although it is found in New York.

Your article covered the general economic conditions, mine is a little more intimate.

ELIZABETH M. BORDEN.

The Modern Small Factory Still Has a Place in Industrial Expansion.

"There is no passing of the small factory equipped with modern machinery and strategically located near markets," announced E. W. McCullough, manager of the Department of Manufacture of the Chamber of Commerce of the United States, in a recent address before the Findlay (Ohio) Chamber of Commerce.

"The day of the big, inflexible plant, facing intense competition in distribution as well as production, seems to be passing," said Mr. McCullough. "The cry that the big fish are eating up the little ones sounds less alarming. Already many of our newer and best managed industries are getting away from building very large units and leaning more strongly toward those commensurate with the market to be supplied and building them near it." Further he said:

"Changes in style, design and utility of lines considered for more than a generation as staple—some lines have been entirely swept out of production. The horse-drawn vehicle, which at one time was produced in hundreds of factories, employed millions of capital and thousands of men. Stoves which consume other than gas or electricity as fuel are on the wane. And so it goes.

"Of the newer commodities and lines replacing the old or

changing them in form, it is said that today five of these, i. e., the automobile, motion pictures, radio, chemical and electrical industries employ or furnish a living to over 30,000,000 people. This has come about through research, the most potent arm of greater efficiency.

"This progress not only casts out old types and styles but seriously affects factory buildings, machinery, equipment and processes, and we have only to look about and compare the factory set-up of today with that of 25 years ago.

"Methods of selling and distribution have undergone similar changes, some of them quite unnoticed in individual cases.

"Competition is becoming more intense and difficult, especially for those handicapped by obsolete conditions in plant, equipment and management, and who have not yet undertaken to take stock of themselves and their problems. Because of the evident progress being made by those using ample capital and modern methods, those in the former class are appealing to the government for aid through legislation to permit trade groups or associations to regulate competition through concert of action; that is, to find an average cost of producing a commodity and fix a price that will yield a fair profit to the producer and a just price to the consumer.

"This looks ideal, but is economically impossible, for no such group could be equal in ability to produce with the same economy or efficiency, and to afford protection to all the price would be based on the costs of the least efficient—thus giving him a bare margin, but a large one to the low-cost producer. Even if such an arrangement were sanctioned, the stress of supply and demand, the economic law, would soon render it quite ineffective."

Louisiana and Texas Waterways.

Impetus to the development of new inland waterways routes which would be of outstanding value in the great national system was given at the recent convention of the Intracoastal Canal Association of Louisiana and Texas at Baton Rouge; the convention took up this phase in assurance that the canal from New Orleans to Corpus Christi, Tex., a distance of 600 miles, is now a certainty. Construction of a gap between Mobile and the end of the Atlantic Deeper Waterways Association project was urged by Senator Joseph E. Ransdell of Louisiana, and he was reinforced by those present.

Following discussion of a new Louisiana project to connect the Mississippi River from a point near Plaquemine to Lake Pontchartrain, Representative Bolivar E. Kemp said he would introduce a bill in Congress to provide for a survey for opening Bayou Manchac from the Mississippi through the Amite River to Lake Pontchartrain. The sentiment of the convention was that the intracoastal canal system in Louisiana and Texas shall not be considered complete until it is connected from New Orleans and from Plaquemine through Galveston, Corpus Christi and to the Rio Grande.

Gratification was expressed over the fact that President-elect Hoover is "one of the greatest friends of the inland waterways system of the United States," as several speakers described him, and prediction was voiced that a uniform channel of nine feet in depth would be adopted for the inland waterways of the country. Also, it was expected that the Chicago drainage canal question would be settled to the advantage of the Mississippi Valley. Former Representative Newton believed that the present five-year program would be reduced to three years.

A trip to the Plaquemine locks at the head of the Plaquemine route to the intracoastal canal was a feature of the session.

C. S. E. Holland of Houston was re-elected president of the Association, for his twenty-fourth term; Roy Miller of Corpus Christi was re-elected active vice-president, and R. B. Creager of Brownsville, Tex., was elected to the board of directors. Beaumont, Tex., was selected for the next meeting.

The South Rejoices in Its Well-Won Political Independence.

Expressions of widespread gratification in the South on the election of Herbert Hoover as President, with felicitations to the MANUFACTURERS RECORD on the victory of the cause in which it was actively interested, have come in large number from citizens of various states to the editor of the MANUFACTURERS RECORD. On the whole, the sentiment is well expressed in a letter by Hollis Bush, a Florida banker, in these words:

"At this somewhat critical time, when this country is entering upon vast improvement programs, and possibly still greater programs of trade expansion into foreign countries, it is most fortunate that we will be guided by the experienced and capable hands of so strong and well trained a man as Herbert Hoover. Of very great importance to the South is the fact that four 'solid' Southern states have voted for Mr. Hoover and his policies."

As a cross-section sketch of the sentiment in the South, several of the telegrams and letters are here published, together with two or three representative letters from other sections.

Mr. Bush, of Hollis Bush & Co., Inc., Miami, says also in his letter:

"The result of the national election must be most gratifying to you, as it is to many of us. The nation, and particularly the South, owes you and your splendid paper a debt of gratitude, for the work you have done toward the election of Mr. Hoover.

"The whole thing seems to indicate to me a very profound economic and political change throughout the entire South. Just what this terrific defeat will mean to the Democratic party, remains to be seen. Unless they realize that the South is now a great and rapidly developing empire, requiring sound policies and the necessary protection for its continued development, it would seem the Democratic party will lose its hold on the people of the South."

Daniel Sully sees in Mr. Hoover's election better conditions for the cotton grower and in a letter from Hollywood, Cal., says:

"My earlier reference to a new era for the cotton farmer in the event of Herbert Hoover's election to the Presidency was due to the underlying and fundamental principle that whenever a human being rises to world greatness it is because humanity recognizes his ability, his perceptive powers and his inherent potentialities to overcome all obstacles by his indomitable will.

"When the news was broadcast last June that Mr. Hoover had been nominated for President, I like many others realized what a stupendous man-factor, personal magneto, was being presented for the consideration of the American citizen. Immediately, I could see the dawning of a new era for the cotton farmer if Mr. Hoover were to be elected President of the United States. There has been and is today the greatest economic waste of physical resources. This loss spreading to every human being is beyond the human brain to compute. President-elect Hoover has inaugurated the era of intelligent, progressive prosperity for all; under his great wisdom, this is going to be of vast importance in helping the cotton producer to come into his own; a life for himself and family, filled with prosperity, wealth and happiness.

"I know that the Southern cotton farmer has intelligence and common sense to master his difficulties, if his surrounding environment is made applicable to his desires. I also know that the intellectual capacity, the tremendous power of perception, the vast resources of the effective application of power of President-elect Hoover will flow with unceasing endeavor to every human being in this glorious country, irrespective of the location in which they live, and this will

create for the Southern farmer an atmosphere and environment such as he never dreamed of."

Somewhat in the hesitancy of modesty is reproduced the following letter from H. W. Doremus of Rudolph Guenther-Russell Law, Inc., financial advertising, New York city:

"I wish to express to you my personal appreciation of the great service rendered to the American people by the adamant stand for Prohibition of the MANUFACTURERS RECORD during the recent campaign. If the press of the country were conducted on the same high plane, we should not only feel in greater degree the beneficent effects of Prohibition, but the common sense of the American people would, in a few years, make the present substantial majority almost unanimous.

"The American people owe to you, Mr. Edmonds, a lasting debt of gratitude for your clearness of vision on the Prohibition question, and your fearless stand in keeping it in the forefront as a major problem.

"It is not ours to command success, but it is a duty and a privilege to stand unflinchingly for what we believe to be right."

Walter Washabaugh, civil engineer, writes from Charlottesville, Va., the home of Thomas Jefferson:

"Permit me to express my hearty approval and thanks for your excellent work during the past Presidential campaign.

"The people when properly aroused assert their power and in nearly every case for the best interests of the country. They have once and for all settled the question of Prohibition and told the world so. Tammany and other questions have been settled in no uncertain way. Virginia has taken her rightful place among the great States of the country, and now watch her future! The South at large has at last thrown off the old prejudices and narrow mindedness and will quickly forge ahead to a greater and more powerful part of the country."

Courtenay De Kalb, an eminent mining engineer, writes from Tucson, Ariz.:

"Once again, the American people has proved itself worthy to carry forward the principles of the Great Republic. It has rebuked the audacity of Tammany, and it has had the courage to stand fast in its devotion to the great reform of Prohibition. That reform has now been tested by a popular vote of the whole country, and the answer of the people has been unequivocally in favor of the man who favored the law of Reform. Even New York, which had been supposedly the centre of opposition, and the very home of that nest of evil, Tammany Hall, proved sound at heart. It was pleasant also to see New Jersey fall into line against Tammany and whiskey.

"The solid South is solid no longer. That too is a great gain. It knits the country into a nation, and dispenses with sectionalism. It proves, furthermore, that you had the courage of a great conviction that the South had grown so big and powerful that it had become superior to such things, and was ready to face other issues than a forgotten war. I imagine that you had to meet a great deal of petty hostility on account of your position in this matter. Now you turn up as ever on the side of victorious truth. I wish to warmly congratulate you."

W. W. Morey, of F. O. Schoedinger, Columbus, Ohio, writes:

"The company with which I have been connected for many years has been a subscriber to the MANUFACTURERS RECORD for 10 or 12 years, at least. Your statement in the Daily Bulletin of November 7 was read with unusual interest and we fully agree with you that it was not any particular party that elected Mr. Hoover, but rather the very best of all the citizens of the United States.

"It is highly probable that with Mr. Hoover in the Presidential chair the South will have a much better hearing than would have been possible had the Presidential election gone otherwise than it did this year."

In a letter from his home at San Antonio, Texas, S. A. Guy says:

"One thing is sure—the Hoover vote in the South, by the

Southern Democrats, was by its highest class manhood and womanhood. Democrats of the South are tired of being led and whipped into line, and the thinking people of the South will no longer be handled by persons who mean nothing for the country at large.

"There is no law ever enacted that has done the wage earner as much good as the Volstead Act. Millions of women and children are now getting the fruits of their husband's and father's labor, that was formerly squandered in the saloons, and if the manhood and womanhood of the country will take an active part in politics and elect true and honest officials, the Volstead Act can be enforced, and do many more millions of dollars worth of good. The good it does now is incalculable.

"Keep up the good work that you are doing for the South!"

First explaining that he is "a Northern born citizen, but not a sectional Northerner," Alfred D. Hyde, interstate realtor, Metuchen, N. J., adds:

"The Southeastern states, which normally are largely Democratic, have been of tremendous help in the election of our President-to-be, notwithstanding the fact that for generations they have been firm adherents and supporters to and of the Democratic party. I have known the South moderately for 30 years, and motored through the Southern states as far south as Fort Myers, Fla., and have pursued my way in a leisurely manner, meeting, fraternizing and mingling with the people in the hotels, in their homes, in their churches, and coming in touch with them in business, and I have been deeply impressed with the clean living conditions and inclinations and the educational ideals of the white people of the Southern states.

"Prior to the election, I was of the conclusion that while the Southern states would vote Democratic for their local government, most of them would vote against the nominee of the Democratic party on the national ticket. I was of that opinion because I felt, from the splendid exhibition of clean living, which is ever before the observing traveler who passes through the South, that the Southern people would absolutely oppose any man or men who would stand as favoring the lowering of the standards. I cannot help feeling grateful to you because of the many noble articles put forward in the MANUFACTURERS RECORD, where you urged and encouraged the people of the Southern states to vote for the Republican national candidates, and thereby show their antipathy for the Democratic national candidates.

"I can understand why in local government the people of the South are Democratic, and it is to their credit that they subordinated their party affiliation to such an extent that they departed from tradition and custom and voted for the Republican candidates on the national ticket. You were a tremendous force in accomplishing this, and it is not only to your personal honor, but certainly to the great credit of the MANUFACTURERS RECORD.

"In the election of Mr. Hoover to the Presidency, a man has been chosen who is well known in the Southern states, and who, from experience, knows many of its problems, and I feel that in common with the rest of the country it will receive its right and proper share of national patronage and benefits that emanate from the legislative halls in Washington."

The Aeroshade Company, through E. R. Kimball, Waukesha, Wis., in a postscript to a letter, says:

"The election is over and we are just as glad as you are that Mr. Hoover, whom you were supporting so strongly, has been elected. We hope it isn't too late to express a word of appreciation for the good work you did in this campaign. We feel that you with others must have exerted a very strong influence in the South."

The following is part of a letter from H. E. Campbell, Royersford, Pa.:

"I am not one of the bigoted Republicans who construe this result as indicating that the South has turned to the Republican party; far from it, in my humble judgment. But I do feel that it is a repudiation of the Democratic party for adopting a whitewashed platform and an endorsement of Herbert Hoover and the principles which he stands for."

From Arthur Elliot Sproul, Miami Beach, Fla., comes the following:

"Your admirable work in behalf of Mr. Hoover throughout

the campaign just closed is certainly deserving of the highest commendation.

"I rejoice at the election of Mr. Hoover, not as a partisan—for I am little of a party man in these days—but as an American citizen who sees in him not only a highly competent man, but also one who will not fail to discern clearly, and to aid in all proper directions, the great movement which, extensive as it already is, yet falls far short of what it should become in the future for the industrial development of the Southern portion of our country. Mr. Hoover will encounter problems of vast importance, not only national, but also international in their scope. God give him the eye to see and the power to perform!"

Very gratifying is the following letter from Charles E. Ecker, secretary of R. E. Olds Co., Lansing, Mich.:

"I wish to express to you my personal appreciation of the splendid work you did in behalf of the election of Herbert Hoover to the Presidency of the United States. No one can measure the influence your magazine had throughout its circulation, but I am satisfied that you have inspired many a person to a better citizenship, and that your magazine contributed largely to the election of Mr. Hoover.

"Now that the principles for which you so valiantly fought have been vindicated and endorsed by the people, please keep up your good fight, so that these principles may become so well grounded that our people may in due season fully appreciate and enjoy their benefits. I wish to congratulate you on your good work and to wish you many years of success."

E. A. W. Jefferies, manager of sales in the gas producer department of the Morgan Construction Company, Worcester, Mass., says:

"Now that it's all over and the victory won so abundantly, I wish to add my mite to the many appreciative words you undoubtedly are receiving on the value of your own distinguished part in bringing it about. This will surely be a new starting point in the development of the South in which the whole country will share.

"I trust also that you may again take up that most vital question, 'Price Competition in the Steel Industry,' which is inexcusable self-destruction."

From L. W. Mims, Florida Bulb & Nursery Corp., National Gardens, Fla.:

"I think all of us owe you a considerable debt of gratitude for the splendid efforts you put forth to help elect a capable, honorable man as President of our Nation for the coming four years, and I wish to say to you that I appreciate all you have done in this good cause, and that I feel you were largely instrumental in achieving the very satisfactory results that we have today."

Louis F. Powell, of David M. Lea & Co., Inc., Richmond, Va.:

"I am so overwhelmed at the victory at the polls that I want to write you a personal letter to thank you for the great constructive work you have done, through the MANUFACTURERS RECORD, in bringing about the election of Mr. Hoover.

"I am also elated over the fact that Virginia has shown to the world where she stands when it comes to the vote on any question affecting moral standards.

"We are indebted to Bishop James Cannon (with whom I have been working for three months) for the wonderful success at the polls in this state. I consider him one of the most marvelous men in this country today, a man who is fearless and who has sacrificed his personal comforts and financial resources in the interest of the moral welfare of this state and nation."

Mrs. W. W. Hampton, of Gainesville, Fla., says, in part:

"Goliath has fallen, and I write to be among the first to congratulate you on your part in this great fight for Prohibition. I voted for Mr. Hoover because I honestly believe that he is the cleanest man and the greatest man who has ever offered himself for the Presidential chair. But who could watch the pros and cons of this election and not realize that the stone of Prohibition has struck Mr. Smith a heavy blow? Honor to whom honor is due. Honor to the Prohibitionist who has stood with his back to the wall, fighting for this cause against great odds! Honor to the white-ribboned woman who has faced ridicule and derision for more than a century! Honor to you, Mr. Edmonds! 'The pen is mightier than the sword,' and your pen has cut deep. We can all 'praise

God from whom all blessing flow,' and give thanks for the great victories won here below."

Two telegrams to the MANUFACTURERS RECORD follow:

Hot Springs, Ark., Nov. 7.

Editor Manufacturers Record:

Hoover has won. You helped materially to elect him. Congratulations.

HAMP WILLIAMS.

Braselton, Ga., November 9.

Editor Manufacturers Record:

Congratulations on your efforts, for Herbert Hoover victory and American ideals.

BRASELTON BROS.

R. P. Johnson, president of the Lakes-to-Florida Highway, Inc., Wytheville, Va., writes:

"Much credit is due you for the aid given in the recent crisis in averting the great calamity that would have been our fate had Governor Smith been elected. The continuance of Raskob as National Chairman means the Democrats are going to liquidate."

A. T. Robertson writes from the Auditorium Hotel, Cleveland, Ohio:

"Congratulations on the noble work done by you for Prohibition. It has helped redeem the South from footloose politicians and saved the country from Tammany and rum rule."

Basil M. Gwathmey writes from Richmond, Va.:

"Will you allow me to express the appreciation of myself and associates for your effective part in attaining the glorious victory for that 'Righteousness that exalteth a nation.'"

From C. F. Benbow, builder and contractor, Winston-Salem, N. C.:

"We are sending you one of the 'Big Berthas' which helped carry North Carolina for Hoover. The counties in which these papers circulated largely gave Hoover more than 35,000 majority. I want to thank you for the great fight that you made throughout the country for what you considered right."

Dr. Charles Northen, director of the Colloidal Institute of America, writes from Ocala, Fla.:

"You are to be congratulated on the very important part you and the MANUFACTURERS RECORD played in bringing about the results in the recent election. It is gratifying to your friends, who know how much you have done to aid in the development of the South, to see how great an influence you exerted. I wish you continued success in your efforts to promote the development of this wonderful section of ours."

From J. A. Hilliard, department historian's office of the Department of Florida, United Spanish War Veterans, Fort Myers, comes the following:

"Character and courage alone enable men to stand as you stood and fought for the interests of the people during the recent campaign. The voters' verdict sustains your judgment."

"I have been a reader of your paper for over 27 years and never appreciated your fearless stand more than in the last few months. These are among your greatest efforts for the upbuilding of the South and your paper is without an equal in its line and in building up and recording the progress of Southern development."

These communications are samples of many received from citizens who rejoice that the South has emphatically demonstrated its political and intellectual independence, as well as its great material progress.

Real Estate Men to Meet.

Report from a committee covering the proposed national standards of practice and the proposed national standards forms will be made at a meeting of the executive committee of the industrial property division of the National Association of Real Estate Boards, to be held in Birmingham, Ala., next January. There will be no general meeting of the division membership at that time. The next special general meeting of the industrial property division will be held in St. Louis, Mo., in October of next year.

ERECTING \$1,300,000 POWER PLANT AT MOBILE.

Southeastern Power & Light Subsidiary to Supply Steam and Power to Paper Mill Now Under Way.

[Telegram to Manufacturers Record.]

Birmingham, Ala., November 13.

The Southeastern Production Company, organized by the Southeastern Power & Light Company under the laws of Florida has begun construction of a combination steam and electric plant at Mobile for the purpose of supplying steam and power to the International Paper Company. The first unit which will cost \$1,300,000 will have a capacity of 10,000 horsepower and 135,000 pounds of steam per hour. Work is being done by the Dixie Construction Company, a subsidiary of the Southeastern Power & Light Company. It will be located on Hog Bayou and will be accessible to both water and rail transportation. The Power Company regards Mobile as one of the South's future industrial centers due to its excellent port facilities, deep water routes to all ports of the world, river navigation and other natural advantages.

ALABAMA POWER COMPANY.

Chain Store Systems Are Growing.

Despite growth of the chain stores, James L. Palmer, professor of marketing, University of Chicago, estimates that independent merchants are doing 61 per cent of the country's retail business, while chains are doing 25 per cent, independent department stores 9 per cent, mail order houses 4 per cent and house-to-house canvassers 1 per cent. Professor Palmer also finds that the grocery trade leads both in number of chain units and in total sales volume in the hands of the chains, and that there are about 1,000 grocery chains operating about 70,000 stores and controlling somewhere between 35 per cent and 45 per cent of the grocery business of the country. He hazards a prediction that chains will continue to grow rapidly in lines already developed.

American Standards Association Established.

Unanimous approval, by the 37 member bodies, of the establishment of the American Standards Association to succeed the American Engineering Standards Committee, is announced by President William J. Serrill, assistant general manager of the United Gas Improvement Company of Philadelphia. One of the important results is expected to be a greater degree of participation by trade associations in the direction of the national industrial standardization movement.

First, the association will organize a board of directors composed of 12 industrial executives. This newly created board, established in recognition of the increasing part which executives are playing in the standardization movement, will control the general administration and policies of the association. The old Main Committee, made up of representatives of all the member-bodies, now becomes the Standards Council, and in its hands will rest all matters connected with the adoption and approval of national standards.

Officers of the association in addition to Mr. Serrill are: Vice-president, Cloyd Chapman; secretary, P. G. Agnew; assistant secretary, F. J. Schlunk. The advisory committee of Industrial Executives includes: J. A. Farrell, president of the U. S. Steel Corporation, chairman; George B. Cortelyou, president of the Consolidated Gas Company; John W. Lieb, senior vice-president of the New York Edison Company; L. F. Loree, president of the Delaware & Hudson Company; and Gerard Swope, president of the General Electric Company.

The American Engineering Standards Committee was organized in 1917 by the American Society of Civil Engineers,

the American Institute of Mining Engineers, the American Society of Mechanical Engineers, the American Institute of Electrical Engineers, and the American Society of Testing Materials. The purpose of the organization was to provide a method of co-operation which would prevent duplication in standardization work and the promulgation of conflicting standards. The United States Government Departments of War, Navy and Commerce became members of the committee in 1919. New members were from time to time added until at the time of the present reorganization there were 37 member-bodies. There are in addition 350 sustaining members, including manufacturers, distributors, associations, etc.

\$400,000 Hotel for Plainview, Tex.

Plainview, Tex.—Contracts have been let for a new hotel here to represent an investment of about \$400,000. H. W. Underhill Construction Co., Dallas, has the general contract and Young & Pratt, Lubbock, the plumbing contract. The structure is to be nine stories high with a full basement and a roof garden, and will contain 150 guest rooms each with circulating ice water, tub and shower bath. A. G. Hinn, J. H. Massie and associates are promoting the enterprise.

TO BUILD LARGE HYDRO-ELECTRIC PLANT ON JAMES RIVER.

Contracts Let for \$1,500,000 Project Financed by Richmonders.

Richmond, Va.—Contracts have been awarded for a \$1,500,000 hydro-electric project on the James River near Snowden by the Rosecliff Development Corp., which is owned and controlled by M. E., I. J. and M. M. Marcuse of this city. Contract for construction has been awarded to Rinehart & Dennis, Inc., Charlottesville, and preliminary work is under way. Engineering details are being handled by Wm. C. Whitner & Co., local firm. The plant, which will have an initial capacity of 13,000 horsepower, will be ready for operation by September 1, 1929. The site is between Amherst and Bedford Counties, 4.5 miles above the Big Island plant of the Bedford Pulp & Paper Co.

The Westinghouse Electric & Manufacturing Co., East Pittsburgh, will supply a portion of the electrical machinery. Five vertical turbine units of 2600 horsepower each to operate under a head of 28 feet will be supplied by James Leffel & Co., Springfield, Ohio.

Mountain Lake Sanctuary and Singing Tower in Florida.

At Lake Wales, Fla., Edward W. Bok, of Philadelphia, has established the Mountain Lake Sanctuary as a memorial to his grandparents and in appreciation of his admission as a resident of this country when he arrived as an immigrant. In the singing tower has been installed what is said to be the largest carillon in the world. There are 61 bells in the set; the largest is nine feet across the bottom and weighs more than 23,000 pounds. The entire set approximates 125,000 pounds in weight, the smallest bell weighing 16 pounds.

Plans for the tower were prepared by Milton B. Medary and construction was handled by Horace H. Burrell & Son, both of Philadelphia; the bells were cast by the John Taylor Sons Bell Foundry at Loughborough, England. Landscaping was done by Frederick Law Olmsted of Brookline, Mass., and stone carving by Lee Lawrie of Philadelphia.

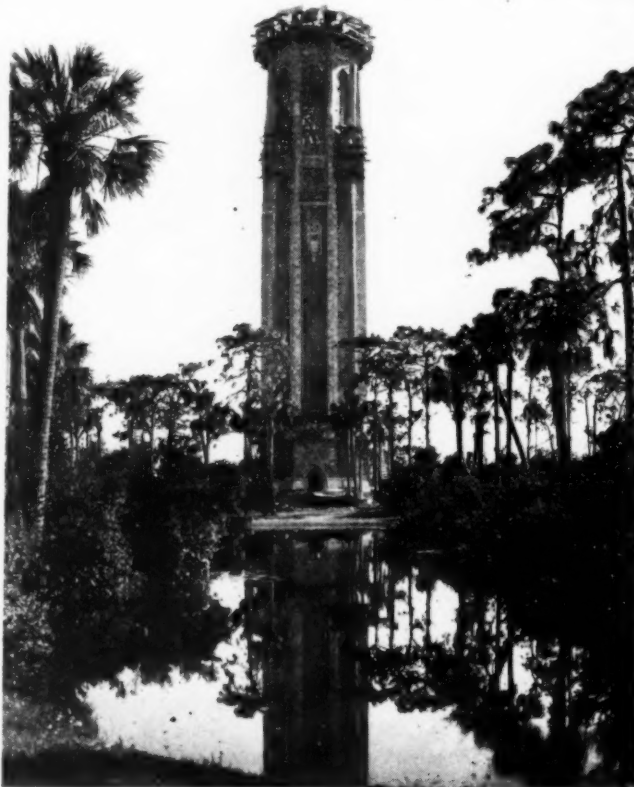
The tower is surrounded by a moat. It weighs 5500 tons and is securely anchored to a reinforced concrete mat 2.6 feet thick. This, in turn is supported by 160 reinforced concrete piles driven to depths varying from 13.2 feet to 24.10 feet below the surface of the ground. The tower is 51 feet wide at its base and rises to a height of 205.2 feet, gradually changing form until it becomes octagonal at the top, and is 37 feet wide. Wherever possible Southern material

has been used in its construction. Creole and gray marble at the base have been cut to suggest the outline of bells. Pink Etowah marble from the Tate quarries in Georgia has also been used, as well as Coquina, a native stone.

In his stone carving, Mr. Lawrie has replaced the traditional gargoyles with pinnacles and other carved units on the buttresses adorned with conventionalized birds of Florida, the crane, pelican and Flamingo, these surmounted by doves

and eagles. Decorative features were worked out by Dulles Allen, who made a series of colored tile insets for the lancet windows, depicting the rise of life from sea forms to man. Similarly, Samuel Yellin of Philadelphia, who fashioned the great north door of the tower, depicts the six days of creation. This door, hand-wrought of copper bronze, centers in its design the various motifs of the sanctuary and the tower. A series of hand-wrought panels portrays the story of the Garden of Eden.

The sanctuary and tower will be formally opened to the public on February 1, 1929, after which the carillon will be played every evening at sunset, and recitals given on special occasions. The carillonneur will be Anton Brees of Antwerp, Belgium, who has played most of the great carillons of the world, it is said, and was recently the carillonneur for a prominent church in New York.



SINGING TOWER CONTAINING THE GREAT CARILLON.

American Institute of Steel Construction Plans Development of the Industry.

[Special Correspondence Manufacturers Record.]

Biloxi, Miss., November 17.

From a number of most important and interesting subjects discussed by the American Institute of Steel Construction, Inc., at its convention here this week, two topics emerged as of prime moment to that industry: Distribution, in the business end, and the perfecting, or improvement, of standard specifications, affecting the production end. Deep and thoughtful study of these and other topics was translated into practical words, and ways were indicated to develop the findings of research into actual and businesslike practice.

On the list of speakers were men of high authority on their respective subjects and their addresses were adopted as texts for group discussions and conferences. At the top of the program were such names as those of Charles M. Schwab, of the Bethlehem Steel Company and Hon. Arthur Meighen, of Toronto, Can., and other papers scheduled included the following: "Legitimate Combinations for Better Business Conditions," C. H. Macdonald, Colorado Fuel & Iron Company; "Structural Steel in the Federal Building Program," J. Edward Cassidy, Washington, D. C.; "Welding As a Fabricator's Tool," Fred T. Llewellyn, president of the American Welding Society; "Flame Cutting of Structural Steel," S. W. Miller and J. R. Dawson, Union Carbide and Carbon Corporation; "The Work of the National Board of Fire Underwriters," Clinton T. Bissell, National Board of Fire Underwriters; "Steel Joists and Their Application to Structural Steel Building," Frank Burton, Detroit, Mich.; "Hangar Design as Developed to Meet the Problems of the Aviator," Major Frank M. Kennedy, Army Air Corps; "The Buyer's Attitude as Related to the Present Competitive Conditions Among Sellers," L. F. Boffey, editor of "The Purchasing Agent"; "The Character of Salesmanship Essential to Meet Present Day Economic Conditions," C. K. Woodbridge, president of the Kelvinator Corporation; "The Legality of Uniform Trade Practices," Abram F. Myers, Federal Trade Commission, and "Beauty in Bridges," Dr. J. Horace MacFarland, chairman of the Pennsylvania State Art Commission.

Mr. Schwab expounded his philosophy of optimism in business and said that he had won success because he had gone through life with a song in his heart, and that every reverse has been met with a smile. After paying glowing tribute to the climate of the South, and its industrial expansion, Mr. Schwab advocated a change in the Sherman Law, so that business men could sit down together and determine how best to dispose of their products. He declared that it was not contrary to the public interests for producers to divide territories and customers among themselves, under supervision, and it was his opinion that a one-price policy in the steel industry, if generally adopted by the mills, would go far towards stabilizing industry.

In his annual address, W. M. Wood, Mississippi Valley Structural Steel Company, Decatur, Ill., president of the Institute, argued for industrial co-operation. He said:

"We are in a period calling for adjustment to new conditions, and he is indeed wise who, realizing that fact, attends to that adjustment promptly. In spite of this, there are those who are unwilling to give up traditions of the past, and who therefore see nothing but evil in the new order of things."

Mr. Wood recommended that work already started, designed to improve the conditions between the industry and (1) the rolling mills, (2) the public, (3) and the competitors of structural steel, be extended and carried further, and added:

"The steel industry is looked upon as an essential industry

and as such its leaders have for years felt that no action for the development of the industry need be taken; that little, if any, effort need be exerted by them for the development of the industry with the exception of that taken along mechanical lines. In the vital problems of sales and distribution and publicity the industry as a whole has seemed to be where it was a generation ago, and until recently this fact seems to have been no cause for concern."

On the distribution end, emphasis was laid on the fact that not only is unreasonable price-cutting an unprofitable and harmful process, but also in itself is far from appealing to prospective purchasers. As a matter of fact, as Mr. Boffey expressed it, the average, competent and businesslike purchasing agent "is a firm advocate of price stabilization," to which he added:

"If the purchasing agent can be assured that so-called market quotations represent the lowest figures at which reputable producers will accept business, he is perfectly content, knowing that his competitors will not be offered concessions which are withheld from him. He will concentrate then on arranging the volume and time of his buying so as to gain the utmost benefit from market fluctuations. Thus, he is pitting his experience, and proficiency in buying against his competitors on a fair and open field.

"Where producers, in a mad scramble for business, cut each other's prices with reckless abandon, the purchasing agent can be certain that the same procedure is followed with other buyers in the field. He gains no comfort from the fact that the concern which secures his order has sacrificed a part of its normal profit to give him a lower price than he should reasonably expect, for he is miserably conscious of the fact that one of the losing bidders will cut even deeper into the profit margin to win an order from his competitor across the way."

Which recalled to some present the words of a cotton textile buyer to a salesman: "When you fellows get through cutting prices, I'll talk business with you; but, I'd be a fool to buy in this market."

Apparently, the point of view of the purchasing agent was of new and forceful interest to those present, and they listened intently to this paper, which read, in part, as follows:

"It is quite true that all purchasing agents characteristically seek to buy at the lowest price at which a producer is willing to furnish the required material. That is an essential aim in purchasing. In typical industries, expenditure for materials represents 60 per cent of the total production cost. An over-liberal or careless purchasing policy, resulting in an increase of 5 per cent in the cost of materials in the course of a year, will reduce by 3 per cent the amount of profit which the company will earn in the same period. Actually, the saving from proficient buying, as compared with haphazard or rule-of-thumb methods, is more likely to approximate 10 per cent according to studies made in government and industry.

"There may be a feeling that the purchasing agent glories in the price demoralization now affecting some groups of industry. Nothing is farther from the truth.

"From the standpoint of the purchasing agent, competition among producers is essential to maintain prices on a fair level. But competition which goes beyond reasonable bounds and becomes an insane struggle for business on any terms, has no charm for the most callous purchasing agent. He recognizes the dangers attending such competition. He must have dependable sources of supply to keep his own plant in uninterrupted operation, and he knows the concern which makes no money will not long remain a source of supply. He knows, too, that his company's welfare is dependent on general prosperity, and that unprofitable operations in a basic industry jeopardize the prosperity of business as a whole. Finally,

he knows that the reaction from unrestrained competition is the establishment of collusive price agreements, whereby producers seek to recoup their previous losses and incidentally to penalize the buyer for his brief period of advantage.

"Regardless of comment to the contrary, the deep-seated desire of the purchasing agent is that all of his transactions shall represent a reasonable profit to his suppliers. From that assumption comes the logical question: Why does not the purchasing agent assure that result by refusing to deal with price-cutters and withholding the pressure which forces prices to unprofitable levels? In the first place, it is unreasonable to place upon the purchasing agent the responsibility for determining what is actually a cut price. Again, if the purchasing agent is to refuse to deal with price-cutters, where shall he turn for his supplies?

"The wail of the seller is that the buyer takes advantage of his helplessness; the justified complaint of the buyer is that the sales executives of the country seem determined to shatter confidence in firm quotations and force the employment of haggling tactics to arrive at the result which is the inherent right of buyers—the right to buy on equal terms with others whose requirements are similar. The crying need for the solution of our immediate economic problems is not more ethics in buying, but more backbone in selling. In the final analysis, however, it must be recognized that price levels are established not by sellers or buyers, but by the inexorable law of supply and demand."

In discussing "Economic Policy of the United States," Abram F. Myers, Federal Trade Commissioner, said, in part:

"The public policy of the United States, as gleaned from the statute books, is summed up in the formula 'competition at home, combination abroad.' The anti-trust laws, while prescribing free and open competition in the domestic market, encourage combination in the export trade. On paper, the formula is ideal. Competition in trade and commerce to the water's edge, as a spur to efficiency and for the protection of our own citizens; combination in the foreign trade to meet the challenge of the state monopoly, the comptoir and the cartel. That it is successful is attested by the ever-increasing volume of our foreign trade, which is not due merely to the fact of combination, a privilege that has been availed of by surprisingly few industries, but to the salutary policy of competition which has kept American industry efficient and alert and has protected it against the mummifying effects of unified operation.

"Moreover, there are other policies which distinguish the United States from the nations which allow to their industries an unlimited right of combination, and which seem to me to justify our policy of free and open competition. It has been the policy of this country to develop quickly its natural resources by encouraging its manufactures through a protective tariff. The primary purpose of the tariff is to give to the protected industry the benefit of the home market. The corollary of such a policy is that the industry enjoying such protection should not be permitted arbitrarily to exploit the people, and the safeguard against such exploitation is competition."

In wide belief that present production and supply at least measure up to demand, the members considered with interest ways and means to stimulate demand. "The curve of productive capacity has risen faster than the curve of consumptive capacity, and the present conditions involve the necessity for all industries to undertake the problem of educating the public in the use of their products," said Lee H. Miller, chief engineer of the Institute. Thus, he explained that, "to educate the public in greater consumption of any product, the producer himself first must be educated as to the problem before him." In other words, "associated industries must maintain and advance their productive capacity, but also must add another string to their bow, which involves the education of themselves and the public in the extended use of materials." The first step, as he saw it, is that "the seller of any product shall be thoroughly conversant not only with all phases of the production of the product, but also must have well established consciousness of the use of the material itself." On this line, he said, the American Institute of Steel Construction has organized a program along constructive lines and has accomplished much in the preliminary stages of the work.

"It should be remembered, however," said Mr. Miller, "that in the developing of a steel consciousness on the part of the

buyer, we should at the same time, by frequent meetings between the sales forces of the fabricating industry and the Institute engineers, maintain a parallel development with the seller side of the problem."

Viewing the business of the industry from still another angle, Mr. Macdonald urged the adoption and organized support of certain principles to place the steel industry on a basis "where it will realize more of the returns to which it is entitled," and summarized his suggestions as follows:

"The public should be educated through a well planned national campaign of publicity to the value of steel and its greater use in all requirements large and small. For example: A tax of only one cent per ton on American steel production would represent a fund of more than \$400,000 per year for publicity, sales promotion and development work.

"A marketing policy should be established and clearly defined to the trade.

"There should be developed in every manufacturer, distributor and user of steel, a realization of his opportunities and responsibilities in and to the steel industry.

"More effort and money should be devoted to neglected markets for the established and logical use of steel.

"A fund should be created for the development of new uses for steel.

"We should be in position to offer through an organized bureau, to any industry using or contemplating the use of steel, all the facilities of the entire steel industry to more rapid and satisfactory development of any practical new product; instead of leaving the customer or some individual steel manufacturer to work out at an undue expenditure of time and money, products which ultimately bring business to the entire industry.

"More attention and study should be given to the problems of individual fabricators and users of structural steel and steel products of every kind, for the purpose of helping them to increase profits by diversification, reduction of shop overhead and selling expense, and by enabling them to operate uniformly more hours per year.

"Concerted action should be taken, following the lead of other organized industries in protecting themselves against proposed unfavorable legislation and unitedly working for the revision or revocation of existing laws or statutes that may be obsolete or out of line with changed conditions; but that are causing unreasonable and unintended difficulties for the manufacturers and users of steel.

"The spirit of 'Live and Let Live,' as advocated by the late Judge Gary, may well be encouraged. It has always proven more practical and profitable than 'Dog eat dog.'"

Then, turning to the subject of organization, Mr. Macdonald said:

"New mergers and consolidations are being continually effected. These may only proceed to a certain point before running counter to the law. No court in the world, however, can or will try to interfere with the legitimate grouping or massed effort of any industry to the purpose of more successfully promoting the use and sale of its products. As a matter of fact, the efforts of the Department of Commerce are directed along this very line, recognizing it as a movement of national economic importance.

"We have heard several remarks to the effect that the steel industry cannot be organized—competition is too keen; too much feeling over imagined or real territorial encroachments; too much ambition on the part of one company to gain ascendancy over another; too much capacity and not enough business. In other words, we are expected to believe that in the industry where the greatest opportunities lie there is no possibility of harmony. In the interest of self preservation, several industries, some of them representing a large percentage of steel consumption, have adopted the principle of united action and organized effort, and they have proved its value beyond question—I refer particularly to the bolt, nut and rivet industry, the fabricators of structural steel and the sheet steel industry. If organized industrial operation is good for large units of the steel industry, why should it not be good for the industry as a unit?

"The answer lies not in better mill practice or production methods; not alone in better sales management; but in a combination of forces for better and more modern distribution

methods. This must be reflected all the way from the executives of individual steel companies down to the salesmen in the field, and from the industry as a whole down through its fabricators and dealers, to the consuming public."

On the subject of specifications, it was first explained that a wide demand by architects, engineers and particularly building officials, that the specification fixing the quality of material used should be restricted to that manufactured by the open hearth process, had been met by a revision to Section 3 of the specification. As to rivets, it was felt that, before any uniform practice on the determination and design of multiple story structures to resist wind stresses is established, it will be necessary to fix the working stresses of rivets in tension under certain conditions. The engineering profession, Mr. Miller felt, is not ready to accept the unrestricted application of tension stresses to rivets, and the revisions in the Institute's specification clearly define the limiting conditions under which rivets may be used to carry tension stresses. A joint conference committee of the American Railway Engineering Association and the American Society of Civil Engineers has prepared a specification on railway bridges and a specification on highway bridges has been prepared by a joint conference committee of the American Railway Engineering Association and the American Association of State Highway officials. Both committees adopted a maximum design stress of 24,000 pounds based upon its use only when the ultimate maximum live load is on the structure. These specifications, however, have not yet been adopted by the various societies interested.

Government construction of many kinds and the tremen-

dous demand from aeronautics were emphasized by Mr. Cassidy as great fields for the steel construction industry.

In an exhaustive report, Charles F. Abbott, executive director of the Institute, said that "strict adherence to the one price policy is a basic fundamental of sound salesmanship," and touched on a large number of important subjects.

Officers elected for the ensuing year were: President, C. N. Fitts, New England Structural Company, Boston; first vice-president, C. M. Denise, McClintic-Marshall Company, Pittsburgh; second vice-president, Clyde MacCornack, Phoenix Bridge Company, Phoenixville, Pa.; treasurer, George E. P. Postor, Hay Foundry and Iron Works, New York; assistant treasurer, L. L. Gadd, Levering and Garrigues Company, New York.

Also the following board of directors was chosen:

J. E. Miller, Bellefontaine Bridge & Steel Co., Bellefontaine, Ohio; H. B. Hirsh, Belmont Iron Works, Philadelphia; N. W. Warren, Dominion Bridge Co., Ltd., Montreal, Canada; J. J. Duffin, Duffin Iron Company, Chicago; Geo. E. P. Postor, Hay Foundry & Iron Works, New York; J. L. Kimbrough, Indiana Bridge Co., Muncie, Ind.; H. A. Fitch, Kansas City Structural Steel Co., Kansas City, Kan.; L. L. Gadd, Levering & Garrigues Co., New York; Reese Llewellyn, Llewellyn Iron Works, Los Angeles, Cal.; C. M. Denise, McClintic-Marshall Co., Pittsburgh, Pa.; W. M. Wood, Mississippi Valley Structural Steel Co., Decatur, Ill.; W. S. Mosher, Mosher Steel & Machinery Co., Dallas, Tex.; A. J. Dyer, Nashville Bridge Co., Nashville, Tenn.; Charles N. Fitts, New England Structural Co., Boston, Mass.; Karl E. Vogel, Omaha Steel Works, Omaha, Nebr.; Clyde MacCornack, Phoenix Bridge Company, Phoenixville, Pa.; G. E. Klingelhofer, Pittsburgh Bridge & Iron Works, Pittsburgh, Pa.; James T. Whitehead, Whitehead & Kales Co., Detroit, Mich.

Building Tung Oil Extracting Plant.

PROJECT UNDER WAY TO HANDLE 1928 FLORIDA CROP—STEADY INCREASE IN GROVE ACREAGE.

B. F. Williamson of Gainesville, Fla., reports that the first unit of a large plant for the extraction of oil from tung oil nuts grown in the vicinity of Gainesville is under way, and that the 1928 crop will be pressed in the new plant. Pressing machinery is being supplied by the V. D. Anderson Co., Cleveland, O., and separating and shelling machinery by Bauer Bros., Springfield, O. The entire operation is automatic and human hands do not touch the product from the time the dry fruit enters the feeding hopper.

It is reported that young trees are coming into bearing rapidly. In 1923 there were 14,000 trees planted in groves; now there are over 400,000 such trees, and preliminary surveys show that about 1000 acres will be planted this fall in Florida.

Over \$75,000,000 of American money is spent outside the United States each year for paint oils, of which amount \$15,000,000 to \$20,000,000 is for tung oil, it is said; thus the production of tung oil in Florida and elsewhere in the South will be the means of

diverting a large part of this sum to the purchase of American products. It is estimated that there are now planted in northern Florida and in the southern part of the Gulf States about 4000 acres of tung oil trees. Surveys are said to show that no insect pests or diseases have seriously affected trees grown in this country over a period of some 20 years, nor in China where they have been growing for a long time. The trees grow fast and normally produce crops the fourth year after setting in the grove. Around Gainesville the trees are planted 12½ feet apart, in rows 30 feet apart, providing 116 trees to the acre. The indicated production of oil based on individual producing trees in Florida may possibly range from 400 to 1800 pounds per acre, starting from the fourth

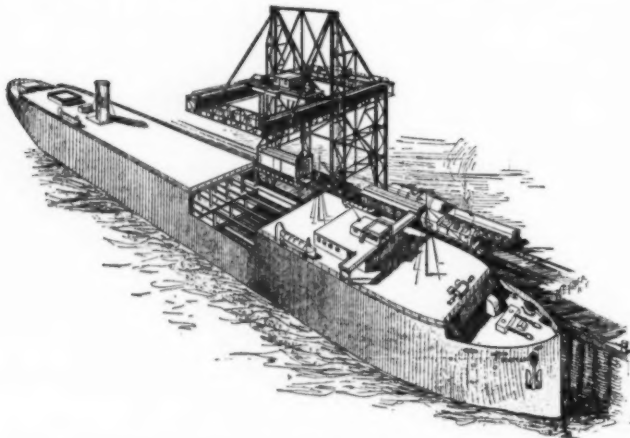
to the ninth year. The trees are hardy and apparently have an average producing age of from 25 to 30 years—probably longer if given particular attention, and it is said that the cost of planting and bringing a tung oil grove into bearing is probably less than for other tree crops.



PART OF A GROVE OF 200,000 TUNG OIL TREES.

New Orleans to Have New Railway Ferry Service to Havana.

At an English shipyard there was launched recently a vessel that, when put into service between New Orleans and Havana in December, will be unique among the sea-going ferries of the world. It is 427 feet in length and 62 feet in beam, with a triple expansion oil burning engine capable of



SPECIALLY DESIGNED CRANE FOR LOWERING CARS FROM ABOVE.

producing a speed of 12 knots. The Seatrain, as the new vessel is called, is a ferry for railway freight cars, and is claimed to be the first of such vessels built to carry cars on more than one deck. The Seatrain has three decks, equipped with four tracks each, and will carry 95 cars. By means of cranes designed for the service, it will be able to unload and load again in 10 hours. The two cranes have been fabricated by the Shaw Electric Crane Works, Muskegon, Mich., and are now being erected at New Orleans and Havana.

The Over-Seas Railways, Inc., for which the vessel is being built, is working on the theory that:

"Speed in transit is the aim of all transportation companies desirous of ren-

dering the most efficient service. The speed of an ocean vessel only partly solves this problem, for delays at terminals tend to slow down the speed from factory to consignee. After the railroad car is loaded and arrives at the port of export there remains the time necessary for unloading, transferring the goods to the steamship pier, holding on the pier until the ship is ready to load, and the time required for the loading itself. Upon the arrival of the vessel at its port of destination, these same motions are duplicated in the process of making delivery to the consignee, involving the same element of time. * * *

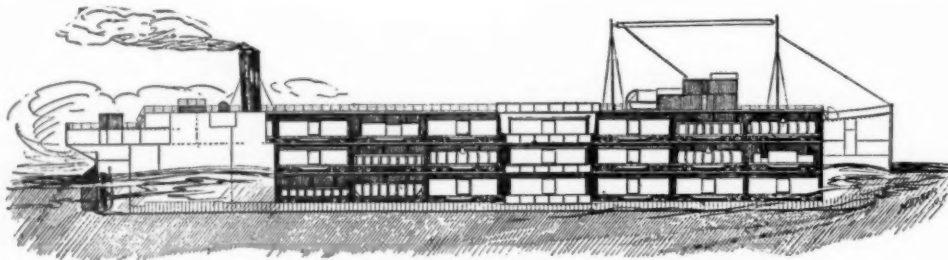
"While a vessel of this type must necessarily contain a great proportion of 'lost space' for the reason that freight cars will by no means fill all available cargo space, the saving in handling time, the elimination of labor costs and the quick turnaround of the ship will more than make up this difference, and furthermore, certain commodities which could not be handled or transported overseas profitably by other means will find a definite place in the operation of a vessel of this type, with profit to the operator."

The company further says:

"The cost of water transportation can be divided into two main parts, terminal expense and vessel expense. The cost of receiving, checking, weighing and handling of cargo at terminals, together with the maintenance of covered terminals and the loading and discharging of the ship, is over 50 per cent of the total cost of water transportation. A check-up of coastwise and nearby foreign lines will disclose that the ships of these lines spend more than 50 per cent of their time in port in order to load and discharge their cargoes. Tankers, ore carriers and colliers spend about 15 per cent of their time in port per year. The cost of maintaining a cargo ship during 35 per cent of its time should be charged as an indirect expense for loading and discharging, as this expense would not be incurred if the vessel carried no cargo."

The Over-Seas Railways, Inc., is stated to be an independent American corporation in no way directed or controlled by any

railroad or steamship company. Graham M. Bush is president of the company; Joseph Hodgson, vice-president. The main office is at New Orleans.



THIS FERRY HAS A CAPACITY OF 95 FREIGHT CARS ON 3 DECKS.

International Paper Company Plans Constructing Another Kraft Paper Mill in the South.

The International Paper Company is planning the construction of another kraft paper mill in one of the Southern states with a capacity of about 200 tons a day. A careful study has been made of sites offering the most favorable conditions and several are now under consideration in the Carolinas. The company expects soon to announce the selection of one of these sites for the location of its new mill.

The plant will be the sixth Southern kraft paper mill of the International Paper Company and will increase the daily capacity of the company in this group of mills to about 900 tons of kraft paper and board. Two of the company's southern mills are at Bastrop, La.; a third is at Camden, Ark.; a fourth is located in Moss Point, Miss.; and the fifth is the Mobile, Ala., mill now under construction.

Big Retail Store for Sears, Roebuck at Houston.

Houston, Tex.—Contract for the erection of a \$600,000 6 or 8-story fireproof retail store building for Sears, Roebuck & Co., Chicago, has been awarded to the B. & W. Construction Co., Chicago. The cost of land, equipment and furnishings will bring the total investment to perhaps \$1,000,000. The architects are Nimmons, Carr & Wright of Chicago.

Statesville Sells \$270,000 Improvement Bonds.

Statesville, N. C.—A bond issue of \$270,000 for street improvements, lights, sewerage and a fire alarm system has been sold by this city on the basis of 4¾ per cent and a premium of \$783. The purchase was made by the Detroit Security & Trust Co., Detroit, Mich., and Braun, Bosworth & Co., Toledo, Ohio.

Taking Forestry to the People of the South.

The American Forestry Association in a very practical fashion is stimulating the South's interest in the preservation of its forests. Five forestry educational trucks, equipped by the Association and co-operating organizations, are touring Georgia, Florida and Mississippi to begin a three-year program of forestry education. The trucks are described in American Forests for October as follows:

"The slogan, 'Stop Wood Fires! Growing Children Need Growing Trees,' stands forth against a red background on the panel sides of each of these trucks. Bolted to the floor of each truck is an electric generator to furnish power for operating a motion picture projector. Stored within the trucks, available for showing, are several forestry films. These include 'Green Barriers,' a vivid portrayal of the effect of woods fires upon forests, range and wild life; 'Pines That Come Back,' showing how forests quickly re-establish themselves if protected from fire; 'Dual Purpose Trees,' the story of the turpentine industry; 'Pines from Seed to Sawmill,' which depicts the dependence of the lumber industry on the forest; and 'Trees of Righteousness,' an inspirational film dealing with forest fire prevention."

Further it is explained:

"Each truck is handled by a team of two men. The unit director precedes the truck to arrange the itinerary with the county superintendent of schools, the county agricultural agent, and other local leaders. He carries with him charts and lantern slides to illustrate the talks which he may give before local luncheon clubs, women's organizations, and other groups in the counties visited."

Everyone alive to forest conditions in the South will readily appreciate the significance of such a move on the part of the American Forestry Association. The 16 Southern states still have a considerable portion of their original forest land, though not much of the original forest growth. Of the 418,636,000 acres originally in forests, these states have left something like 229,628,000 acres of forest and idle land. It is true that virgin timber is almost gone and most of what remains is second-growth, but the value of it is very great and it is steadily increasing as the population grows and the national supply dwindles. From this reserve, fires, insects and disease take a huge toll annually, and when the drain of cutting, of fires and other wastes is compared with replacement by new growth, it becomes evident that the destruction is at a rate of four or five times as rapid as the regrowth.

A considerable number of large lumber and paper companies in the South are now spending money freely in protecting their second-growth from fire and in replanting their cutover lands. The Great Southern Lumber Company

in Louisiana has for several years been a leader in this work, and the Long Bell Lumber Company in Florida has this year been collecting cones of the slash pine for threshing, in order to secure seeds for planting. But the Southern states, without exception, have been shamefully backward in developing forest departments and in making appropriations for the work of protecting their immense forest wealth. Louisiana is a leader now, with a progressive forest policy, but it took heart-breaking work on the part of one far-sighted lumberman, and a cutover and idle area of over 13,000,000 acres compared with about 4,000,000 acres of forest land, to arouse the state. Alabama is going ahead and, in fact, all the Southern states now are making progress, trailing somewhere in the wake of Louisiana, yet not one is doing what it should do.

The 16 Southern states, with a total forest cutover and idle area of nearly 230,000,000 acres, in 1927 appropriated \$450,000; or to be exact, 13 of the 16 appropriated that amount. Arkansas, Florida and South Carolina had no forestry departments in 1927. In other words, 13 Southern states appropriated the sum of \$1 for every 512 acres of forest or potential forest land, to cover all expenses of fire protection and replanting of idle land. By contrast, the six New England states, with 36,428,000 acres of forest and idle land, appropriated in the same year over \$936,000 for their forests. This is at the rate of \$1 for every 39 acres. Yet forest land in the South is from two to four times as productive as forest land in New England, and will pay larger dividends on protection. Nobody has ever accused New Englanders of being wasteful or prodigal in their investment of money. New England is a highly industrialized section, has learned by bitter experience the value of forests, and is endeavoring to make up for time lost in the cultivation of its forests. The South, rapidly developing into an industrial section, with a huge annual demand for lumber to supply its growth, should learn from the experience of that section which has led the nation in industrial development.

It is true, the South is moving now in the right direction but with a slowness that strains the faith and patience of those who appreciate the situation. It has finally become evident that many more years must elapse before any wholehearted, thoroughgoing forest program can be expected throughout the South, and the American Forestry Association is setting out to carry the message to the people, town

by town and school by school. When the people who elect the state legislators have, by this patient process, been educated to an appreciation of the great need for safeguarding and perpetuating forest wealth, then and only then we will have legislatures not afraid to invest the states' tax funds freely in so rich a source of future taxes, or to provide sane and sensible systems for taxation of growing forests.



FLEET OF 3 TRUCKS FOR THE SOUTHERN FORESTRY EDUCATIONAL PROJECT OF THE AMERICAN FORESTRY ASSOCIATION.

Prawn Fishing on South Atlantic Shores.

By N. L. WILLET, Beaufort, S. C.

Eighteen years ago Charles Vecchio, Mayport, Fla., shipped 100 barrels of prawns to New York City and received \$4 for the lot. Florida called Vecchio crazy and New York on her part had never heard of prawns. Today there are literally thousands of prawn boats operating on the East Coast of Florida shipping out annually 15,000,000 pounds of prawns throughout the United States, while Mr. Vecchio with private wire and 100 telegrams a day lives out over the Mayport waters in a home in a kind of Babylonian garden of flowers growing out of transported soil.

The prawn industry began in Georgetown, S. C., ten years ago and in Port Royal, S. C., only five years ago. Up to that time the presence of deep sea prawns feeding on the bottom in from 30 to 60 feet of water was unknown in South Carolina. Today Georgetown has a large prawn industry while Port Royal will have this year 100 boats, half a dozen operators and perhaps some days will bring in 75,000 pounds while Brunswick, Ga., will operate 700 or 800 boats. The habitat of the prawn seems to be from Georgetown, S. C., to Fort Pierce, Fla. The main prawn fisheries are located at Georgetown, Charleston and Port Royal, in South Carolina; Savannah, and about Brunswick, Georgia, and Fernandina, Mayport, St. Augustine, Mosquito Inlet, Daytona, Port Orange and Fort Pierce, Florida.

Here at Beaufort, or Port Royal, we ship by express the fresh prawn with heads removed, or canned prawns. The business begins, say at Georgetown, S. C., late in July, ending in South Carolina and Georgia in December, and it then begins in Florida and ends in June. Florida has a long shipping season.

The business is run mostly by Sicilians. The boats are sea going, up to 40 horsepower and cost each \$6000 or \$7000. Mid deck has a large hold with ice into which the prawns as caught are dumped from the nets. The prawn cooks red like the lobster and in aforetime lobster sections it today takes the place of this highly regarded crustacean. A bushel of whole prawns weighs 50 pounds and the net weight after heading is 28 pounds. The consumer in the North may pay

about 50 cents a pound for his prawns. The prawn is from six to nine inches in length.

Prawns migrate, following on down the South Carolina and Georgia coasts to lower Florida (and a few are caught at Apalachicola) and here we lose them. The prawn boats simply follow this migration, operating through a possible season of nearly 10 months.

The term prawn is veiled somewhat in mystery and so I am not speaking here in the ultimate. This big fellow out in the deep sea bottoms is all a new story. Formerly there was here the one term shrimp (probably *Pensua Brusiliensis*). Shrimp inhabit multitudinously all of our shallow waters and tidal marsh inlets. The prawn operators and the observant inhabitants today on the coast will tell you that prawns and shrimp are distinct and different—the big boats catch the big prawns and the little boats catch the smaller crustacean—the shrimp.

All along the prawn area there is, too, a big commercial fish business. Will the catching say of 20,000,000 pounds yearly of prawns exhaust the fish? There is no sign of this as yet for both industries here today are on the increase. Prawns are caught within the three mile limit and so are under State control.

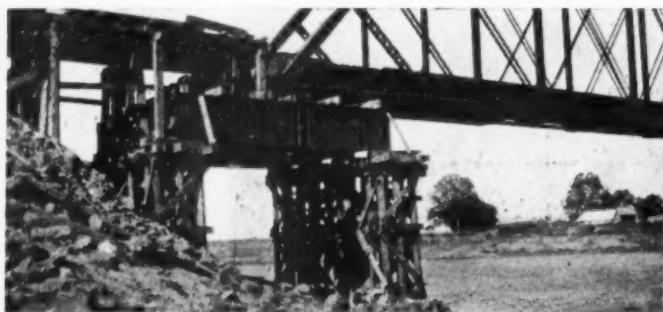
If ever conservation is attempted it must be joint action by South Carolina, Georgia and Florida, for it would be foolish and suicidal say for South Carolina to restrict prawn netting simply in the end to release to Georgia and Florida this much larger amounts for them to catch.

Another mystery here is the breeding place of prawns. It has now been discovered that about 33 miles at sea out in front of Georgetown, S. C., the bottom is a kind of pumice stone full of holes. In each hole you will find at a certain season a young prawn—millions and millions of them. We are told that they are prawns and not shrimp. And so seemingly we owe our South Atlantic prawn industry to those pumice-like rocks far out off Georgetown—rocks full of strange holes and every hole the house of a strange looking inhabitant, the mature flesh of which resembles lobster.

Adding Steel Span to Bridge in Arkansas.

Because the Red River near Garland City, Ark., is changing its course, it has become necessary for the St. Louis-Southwestern Railway Co. to add a 250-foot steel span to its bridge at that point, calling for the construction of one new pier and the replacement of another. The Kansas City Bridge Co., Kansas City, Mo., has contract for the piers and for furnishing and erecting the steel span. The piers, the bases of which

are 77 feet below ground level, are being constructed by the pneumatic process. Reconstruction of the old pier requires the removal of the original cylinder pier under the end of a 200-foot span, and during construction the weight of this span and trains is carried on four deck plate girders on pile piers. The underground portion of the old cylinder pier is being removed from inside the caisson as the sinking of the pier progresses. The job will be completed in four months.



WHILE THE NEW SPAN IS UNDER CONSTRUCTION, THE OLD SPAN IS CARRIED ON A TEMPORARY PILE PIER.

Fertilizer Association Asks Private Operation for Muscle Shoals.

A definite proposal for the disposition of the Government's property at Muscle Shoals was adopted by the Southern convention of the National Fertilizer Association at its recent session in Atlanta. This is said to represent the future policy of the fertilizer industry on this question with which Congress has wrestled for years.

In the preamble, it is cited that the National Defense Act of 1916 decreed that the Government properties at Muscle Shoals shall be devoted to the production of nitrates or other materials needed for munitions of war and useful in the manufacture of fertilizers and other useful products, and also that the plant be constructed and operated solely by the Government and not in conjunction with any industry or enterprise carried on by private capital. Under the existing temporary arrangements for the production and disposal of power by the War Department, it adds, electric power worth approximately \$1,300,000 has been sold annually during the last two years—"an income which could gradually be increased if contracts for the sale of power for longer periods could be executed with assurance that their fulfillment would not be prevented by legislation or otherwise, except in the event of war." "Nitrates," it continues, "can now be produced more economically by other processes than the cyanamid process, and by the use of coal at less cost than by the use of hydro-electric power"; further, the law does not authorize the manufacture of phosphoric acid or the purchase of fertilizer ingredients, or the making of complete fertilizers, but the production of nitrates useful both in fertilizers and in other useful products.

Intensive investigations by the War Department, the preamble says, have shown that, owing to changes and advances in the art of fixation of air nitrogen, the nitrate plants of this project are of little value for national defense; also, the area near Muscle Shoals and areas in contiguous states now have an insufficient supply of power or, with the development of industry soon will have, and plants for producing phosphoric acid and complete fertilizer in excess of the present demand are already in existence.

Therefore, the National Fertilizer Association petitions the Congress to authorize the sale, separately or jointly, of the Wilson Dam with its hydro-electric plant and the steam power plant No. 2, safeguarding properly the public interest in navigation, flood control, and the development of the water-power resources of the Tennessee River. Otherwise, it asks that these plants be leased by the War Department to be operated under the supervision of the Federal Power Commission with the cooperation of such state commissions as may have a direct interest in their operation, and that if neither sale nor leasing is found feasible the government shall continue to operate the plants through the War Department, selling the surplus power produced at the switchboard to the highest responsible bidder, giving such preference as may be fair and just to power companies operating in the Muscle Shoals area. This shall be done under regulations to be prescribed by the Federal Power Commission, and if the plants are sold or leased proper provision shall be made for their recapture in event of national necessity, and if leasing is resorted to, a suitable block of power shall be reserved for the use of the United States Department of Agriculture for certain purposes hereinafter described.

The Association also recommends that nitrate plant No. 1,

an experimental or pilot plant, constructed to use one of the modern fixation processes, be assigned to the Department of Agriculture with an appropriation sufficient to put it in condition for efficient experimental operation and with a suitable quantity of hydro-electric power for its use in chemical and technological research in nitrogen fixation, including the production of nitrates for making fertilizers and other useful products on a scale sufficient for agronomic and other experimentation; that manufacture be adjusted as nearly as possible to experimental and demonstrational needs, and that any product in excess of these needs be sold in accordance with the existing law governing the disposal of surplus government property.

A sum equal to three-fourths of the income received from the sale of power, but not to exceed \$750,000, shall be appropriated, under certain rules and regulations, for research in fertilization and plant nutrition and for experimental and demonstration work in the use of fertilizers on the farm, provided that the minimum sum allotted to any State shall be \$8,000. A fourth of the income from the sale of power, but not to exceed \$250,000, shall be appropriated directly to the United States Department of Agriculture to cover the cost of operating plant No. 1 for research and experimentation. Plant No. 2, the cyanamid plant, shall be kept in standby condition by the War Department for one to three years, for such value as it may have for national defense; that at the end of the period determined the plant shall be sold to the highest bidder, except that the ammonia oxidation or nitric acid part of it may be retained for national defense on recommendation of the War Department.

In conclusion, all proceeds from sales, whether of property, products or of power during any period of government operation shall be covered into the Treasury, earmarked "Muscle Shoals Income," and that funds for conducting the activities mentioned, including the needs of the War Department for the operation of locks and other structures relating to the Wilson Dam, shall be estimated and budgeted annually in the manner that is customary with other appropriations for the support of the executive departments.

Declaring that there is not an acre of land in the whole United States that does not need at least one of the three principal elements of a complete fertilizer—nitrogen, phosphoric acid or potash—Harry D. Wilson, commissioner of agriculture of Louisiana, said that the farmers of the country were learning that they must use a good fertilizer on good land "and not be too stingy with the amount of the application." Also, he urged the use of cotton in the manufactured goods in the South, saying: "Wrap the cotton of the South in cotton and put your fertilizer in cotton sacks."

When the average member of an industry cannot make a fair profit, those above the average cannot make what they should, and those below the average are fast on the road to bankruptcy, said L. W. Rowell, vice-president of the association. Even the best in the fertilizer industry cannot be accused of making a fair profit during the last few years, he added, and one of the most important activities for the common good of the industry would be to work to increase the consumption of plantfood per acre. This, he said, is an "educational job."

Among the other speakers were President E. L. Robins of the Association, Dr. Firman E. Beer, Ohio State University; Horace Bowker, American Agricultural Chemical Company, New York; Major I. D. Carson, N. W. Ayer & Son, Philadelphia; Chester H. Gray, American Farm Bureau Federation, and Harry C. Butcher of "The Fertilizer Review."

Common and Face Brick Census Completed.

Establishments engaged primarily in the manufacture of common brick in 1927 reported to the Department of Commerce total products valued at \$74,624,752. The production of common brick, including that manufactured as a secondary product by establishments classified in other industries, for each of the three years 1925 to 1927, inclusive, was valued as follows: 1927, \$77,219,141; 1926, \$88,226,625; 1925, \$88,551,400. The total for 1927 represents a decrease in value of 12.5 per cent as compared with that for 1926 and of 12.8 per cent as compared with that for 1925.

This industry title covers establishments engaged primarily in the manufacture of common brick from clay. It does not cover the production of common brick made of sand and lime, concrete, or other materials.

Of the 803 establishments reporting for 1927, 76 were located in New York, 76 in Pennsylvania, 53 in North Carolina, 37 in California, 36 in Illinois, 35 in Virginia, 34 in Texas, 27 in Ohio, 25 in Connecticut, 24 in Alabama, 24 in Massachusetts, 23 in New Jersey, 21 in Wisconsin, 20 in Tennessee, and the remaining 292 in 34 States and the District of Columbia. In 1925 the industry was represented by 925 establishments, the decrease to 803 being the net result of a loss of 201 establishments and a gain of 79. Of the 201 establishments lost to the industry, 50 went out of business prior to 1927, 35 reported commodities other than common brick as their principal products and were therefore transferred to the appropriate industries, 83 were idle throughout the year, and 33 reported products valued at

less than \$5,000. (No data are tabulated at the biennial censuses for establishments with products under \$5,000 in value.)

The Face Brick Industry.

The establishments engaged primarily in the manufacture of face brick in 1927 reported products valued at \$46,179,476. The total production of face brick, including that manufactured as a secondary product by establishments classified in other industries, for each of the three years 1925 to 1927, inclusive, was valued as follows: 1927, \$41,504,486; 1926, \$44,516,236; 1925, \$45,427,625. The total for 1927 represents a decrease of 6.8 per cent as compared with that for 1926 and 8.6 per cent as compared with that for 1925.

This industry title covers establishments engaged primarily in the manufacture of face brick from clay. It does not cover the production of hollow fancy, or enameled clay brick which may be used for facing on buildings.

The 256 establishments reporting for 1927, were located as follows: 63 in Pennsylvania; 45 in Ohio; 16 in Indiana; 15 in Illinois; 10 in Texas; 6 in Missouri; 6 in Oklahoma; 6 in Virginia; 5 each in Arkansas, Iowa, Kansas, North Carolina, Tennessee, Utah and Washington; 4 each in California, Colorado, Georgia and West Virginia; 3 each in Alabama, Kentucky, Michigan, New Hampshire, South Carolina and Wisconsin; 2 each in Maryland, Minnesota, Montana, New Jersey, New York and North Dakota; and 1 each in Arizona, Connecticut, Florida, Maine, Massachusetts, Mississippi, Nebraska and Oregon.

COMMON BRICK SUMMARY FOR 1927 AND 1925.

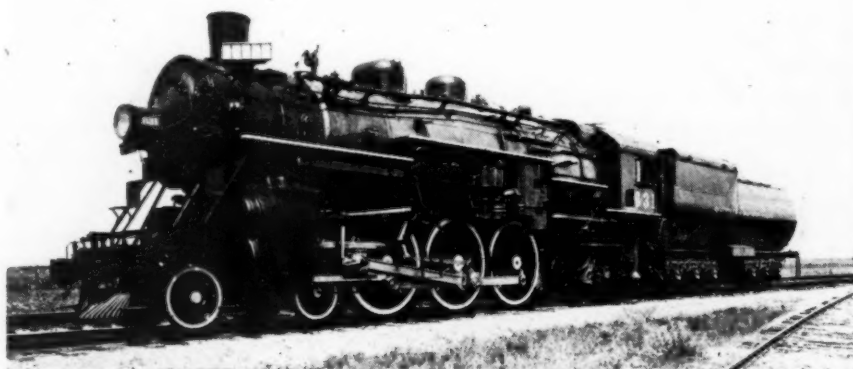
| | 1927 | 1925 | Per cent of decrease (—) |
|------------------------------------------------------------------|--------------|--------------|--------------------------|
| Number of establishments..... | 803 | 925 | —13.2 |
| Wage earners (average for the year) | 26,297 | 29,524 | —10.9 |
| Wages | \$31,287,995 | \$36,280,399 | —13.8 |
| Cost of materials, supplies, fuel and purchased power, total.... | \$21,036,632 | \$24,282,463 | —13.4 |
| Materials and supplies..... | \$6,185,947 | | |
| Fuel and power..... | \$14,850,685 | | |
| Value of products..... | \$74,624,752 | \$87,276,317 | —14.5 |
| Value added by manufacture.... | \$53,588,120 | \$62,993,854 | —14.9 |
| Horsepower | 172,359 | 174,369 | —1.2 |

FACE BRICK SUMMARY FOR 1927 AND 1925.

| | 1927 | 1925 | Per cent of increase or decrease (—) |
|------------------------------------------------------------------|--------------|--------------|--------------------------------------|
| Number of establishments..... | 256 | 250 | 2.4 |
| Wage earners (average for the year) | 15,312 | 14,701 | 4.2 |
| Wages | \$18,315,379 | \$18,293,178 | 0.1 |
| Cost of materials, supplies, fuel and purchased power, total.... | \$14,648,949 | \$14,579,608 | 0.5 |
| Materials and supplies..... | \$5,111,297 | | |
| Fuel and power..... | \$9,537,652 | | |
| Value of products..... | \$46,179,476 | \$47,913,717 | —3.6 |
| Value added by manufacture.... | \$31,530,527 | \$33,334,109 | —5.4 |
| Horsepower | 97,161 | 82,420 | 17.9 |

Big Locomotives for Southern Pacific Lines in Texas.

Three new oil burning locomotives, built by the Baldwin Locomotive Works, Philadelphia, were delivered in September to the Texas and Louisiana division of the Southern Pacific Lines. These locomotives, together with nine similar ones previously purchased, are used on the through passenger train runs between El Paso and Houston. They are of the Pacific type, with 73½ inch driving wheels, 25 by 30 inch cylinders and carry a steam pressure of 200 pounds. They are equipped with the latest auxiliary parts such as locomotive booster, feed-water heater,



PACIFIC TYPE OF LOCOMOTIVE. OIL BURNING.

type A superheater, power reverse gear, etc. The tenders behind these locomotives are equipped with a cast steel water bottom type frame and 6-wheel trucks with cast steel frames. The tenders have a capacity of 16,150 gallons of water and 4912 gallons of oil. The locomotive weighs 313,800 pounds and the tender 291,100 pounds.

The Business Side of Dairying in South Carolina.

ECONOMIC FACTORS IN THAT STATE APPLICABLE IN GENERAL TO THE SOUTH.

By A. B. BRYAN, Agricultural Editor, Clemson College, S. C.

Compilations of statistics on dairying by Ward C. Jensen and B. A. Russell of the agricultural economics division of the South Carolina experiment station indicate that South Carolina's population increased 256 per cent and the number of dairy cows 165 per cent from 1870 to 1925. It is important that farmers study markets, prices and experiences of the better paying dairy farms, if they hope to enjoy a good standard of living from the dairy business.

There are 10 creameries in South Carolina at the present time, six of them in the Piedmont and four in the Coastal Plains region. Some of the creameries engage in several lines of business, such as making butter, distributing milk, making ice cream, buying and selling poultry products and vegetables, and sometimes dealing in ice and fuels. Some line is generally depended on other than buttermaking. Most of the creameries do not have a large enough volume of butter business either to depend on this alone or to make butter at a reasonably low cost per pound. Size or volume of business is extremely important in the development of creameries on a permanent basis. As these creameries grow in size, the making of country butter will no doubt decline as the farmer cannot compete with a creamery in buttermaking. Specialization must be depended upon to make butter of uniform high quality at low cost.

Records were obtained on the dairy enterprise on 32 dairy farms in the Greenville area and 20 farms in the Greenwood area representing the Piedmont region. Twelve of these farms are producing butter, while all the rest are retailing or wholesaling sweet milk. The conditions on the more profitable Piedmont farms may be studied to advantage by those who are interested in dairying. There are several important principles brought out in this study, among them:

1. Milk and butter prices show seasonal trends, being highest in the winter months.
2. Practically all roughages required by the cows can be home-grown at reasonable costs. One cow requires about 1.5 tons of legume hay yearly. Five acres of alfalfa will produce enough hay for 15 cows. Where alfalfa is not adapted, cowpea hay may be grown, the yield, with good management, averaging one ton per acre.
3. Ingredients for mixed concentrate feeds may be purchased, and by home-mixing a saving of several dollars a ton can be realized. Certain ingredients, such as cottonseed meal, can be provided from the farm.
4. Succulents, such as silage, fed in the winter tend to keep up milk production when grass is not available.
5. By carefully selecting laborers or doing the work one's self, much better results can be obtained from the cows than is usually the case. Regular milking, milking the cows dry, and keeping them comfortable are all very important.

Records were obtained on about 65 dairy farms in the Coastal Plains region, around three centers—Columbia, Florence to Orangeburg, and Charleston. The Columbia dairy farms represent the Sand Hills, the Florence-Orangeburg dairy farms represent the Middle Coastal Plains, and the Charleston dairy farms are in the Coastal Flatwoods. The dairy farms in the Coastal Plains region are comparatively large, and much more pasture is used than in the Piedmont. The Charleston dairies seem to be especially efficient in milk production, partly because of large volume of business. Some principles for success in the dairy business developed from the Coastal Plains records may be listed as follows:

1. There are wide opportunities for farmers to increase production in the winter and get the advantage of higher prices for more milk.
2. Necessary roughages can be raised on the farm. Soy-

bean hay will yield at least a ton per acre, making 30 acres necessary for a 20-cow dairy. Cowpea hay does well also in most parts of the Coastal Plains region.

3. By home-mixing the concentrate ration and including cottonseed meal, savings can be made in many cases.

4. Corn silage yields about three tons per acre when corn yields 20 bushels per acre. Many farmers can grow 30 to 40 bushels per acre. This provides succulent feed for the colder months.

5. Since the Coastal Plains dairy herds are relatively large, about half the labor is usually hired. Care in hiring such labor is important because labor makes up a large part of the cost of production.

Too rapid expansion of dairying is to be guarded against, but if milk, butter, ice cream and cheese can be made of such high quality and up to such standards that consumers will really enjoy them, as can be done, dairying will increase naturally and along sound lines. There is opportunity for some farmers to supply the deficits of local markets. Others may grow into dairying and produce cream and butter. In this case feeding and management must be carefully studied so as to lower the costs as much as possible.

The Piedmont dairy farmer must depend more on alfalfa and cowpea hay as roughages, and make stover or silage especially when he can grow corn on bottom-lands. The Coastal Plains dairy farmer must use soybean hay more as a roughage, and produce silage as a succulent. Cows in the State are generally fed too little hay and succulents and, as a result, the bill for concentrates is relatively too high. Silage, where yields are good, is preferable to beet pulp as a succulent on a cost and value basis. For grazing, the Piedmont farmer can plant rye or oats; the Coastal Plains farmer, corn and velvet beans, and oats or rye. For pasture, Bermuda grass, carpet grass, lespedeza and paspalum seem most promising and may be worked in as seem best according to local soil conditions.

By the greatest possible use of grazing crops, pasture crops and succulents, the feed cost can be reduced and the total production expense be lowered; and reductions in costs must be made, if our dairymen are to supply all the products at present shipped in from outside the State.

American Mining Congress to Meet.

The American Mining Congress, national organization of the mineral industry, will hold its annual convention at the Mayflower Hotel, Washington, December 5 to 8, and will plan for extension of its work along lines of further development of the industry. Governors of states having important mining interests will send official delegates, and representatives of various Government departments having contact with the industry will attend and participate in discussions.

The enlarged use of machinery in industry will occupy attention and advanced steps in the mechanization of mines will be the keynote for this discussion at the first formal meeting of the national committee on mechanized mining. Meetings will be held of the boards of directors of the American Mining Congress, and of its Western, Southern and Manufacturers divisions and the Southern division directors will decide on the time and place for the next Southern industrial development conference, to be held in March in a Southern city.

J. G. Bradley of Dundon, W. Va., president of the Elk River Coal and Lumber Company, will open the convention as president of the American Mining Congress with an address on the organization as the "Clearing House For

Mining," and the speakers' list includes: Senator Tasker L. Oddie of Nevada, chairman of the Senate Committee on Mines and Mining; J. W. Furness, chief of the mineral division, Department of Commerce; S. L. Mather of Cleveland, president of the Cleveland Cliffs Iron Company; Sidney J. Jennings, president of the United States Smelting, Mining and Refining Company; C. F. Kelley, president of the Anaconda Copper Mining Company; B. Mifflin Hood of Atlanta, president of the B. Mifflin Hood Brick Company; E. C. Alvord, assistant to the Secretary of the Treasury, and H. B. Fernald of the general tax committee of the American Mining Congress.

\$1,500,000 IN CONTRACTS BY TENNESSEE ELECTRIC POWER COMPANY.

Begin Work on Substations and Transmission Lines.

Chattanooga, Tenn., November 13—[Special.]—Contracts have been let by the Tennessee Electric Power Company and its subsidiary the Nashville Railway & Light Company for new substations and transmission lines to cost approximately \$1,500,000.

These transmission lines will run east and south from Nashville through Centerville to Hohenwald and from Centerville, north to McEwen, and 58 miles will be steel tower construction of which 14 miles will be double circuit. There will be 51 miles of wood pole construction. All conductors will be aluminum steel core, with copperweld cable used as a ground wire. These contracts include the construction of four new substations located as follows: Nashville, Centerville, McEwen and Hohenwald. The existing South Substation in the city of Nashville will be enlarged.

The work is being carried out by Stevens & Wood, Inc., Nashville and New York, who are also doing the purchasing. Clearing rights-of-way has started. Material is being purchased and the lines and substations should be ready for service during next summer.

To Receive Bids Soon for \$450,000 Church.

Atlanta, Ga.—Bids will be opened Nov. 30 for a church and Sunday school building for the First Baptist Church estimated to cost \$450,000, after plans by R. H. Hunt Co., architects, Chattanooga, Tenn., and Burge & Stevens, associate architects, this city. Contractors estimating include: Griffin Construction Co., Pittman Construction Co., Southern Ferro Concrete Co., H. J. Parr Construction Co., and A. J. Krebs, all of Atlanta.

\$1,000,000 Apartment for Nashville.

Nashville, Tenn.—Plans have been announced by the Pritchett-Thomas Co., local builders and operators, for the construction of a \$1,000,000 apartment building in this city. The structure will be 100 by 150 feet, from 12 to 15 stories, the first floor to provide space for stores and shops and the upper floors to be devoted to three, four and five-room apartments. Two-room bachelor apartments are also contemplated.

Jacksonville to Vote on \$2,100,000 Bonds.

Jacksonville, Fla.—An election will be held in January on a proposal to issue \$2,100,000 worth of bonds for sewer extensions, street widening and for paying the city's portion of petition paving projects. All are to bear 4½ per cent. interest, and \$1,500,000 are designated sewer and drainage bonds, \$300,000 paving intersection bonds and \$300,000 street and highway improvement bonds.

CLEVELAND FIRM GETS CONTRACT FOR \$15,000,000 PLANT.

H. K. Ferguson Co. to Erect Cable Factory at Baltimore for Western Electric Co.

The H. K. Ferguson Co., Cleveland, O., has been awarded the contract to design and construct a \$15,000,000 plant for the Western Electric Co., New York, to be built in Baltimore, on a site of about 125 acres recently acquired from the United Railways and the Canton Co. The plant, which will initially give employment to 1200 persons, is to be the nucleus of a much larger plant. The Cleveland firm has already started engineering work, and its contract includes necessary surveying, clearing the site, constructing bulkheads and dredging and filling. In addition to the erection of the buildings comprising the plant proper, the Ferguson Company will erect a power house and install all the necessary equipment.

Telephone wire and cable will be manufactured initially, the weekly production to total 110,000,000 conductor feet of cable, the capacity being expressed in the number of feet of wire in the finished cable. Detailed information concerning the project was published in the MANUFACTURERS RECORD of November 8.

Southern Railroad History Recalled.

Recollection that the great railroad system of the United States, now aggregating about 250,000 miles and with 90,000 miles in the South, really originated in the South, is brought to mind by an exhibit at Charleston, S. C., of a replica of the locomotive which pulled the first train over a Southern track. This engine, then known as "Best Friend of Charleston," has been reproduced by the Southern Railway Company, and will draw a train to Columbia, S. C., and other cities. The original locomotive was built at West Point Foundry, New York.

From records, it appears that the first railroad in the world to use steam locomotives was chartered by the South Carolina legislature on May 12, 1828, known as the Charleston and Hamburg and to extend from Charleston to the Savannah River, 136 miles. Regular passenger service was established on January 15, 1831, and in time the "Best Friend of Charleston" was reinforced by the "West Point," which could haul four cars two and three-quarter miles in 11 minutes.

About 1852, the road between Charlotte, N. C., and Columbia, S. C., was completed and the Greenville and Columbia Railroad, between those two cities, was opened for service, but running only to Newberry, S. C., at the outset. On October 18, 1858, the line of what is now the Southern Railway was completed from Columbia to Union, S. C., this now being a link in the trunkline which connects Charleston and Columbia, via Asheville, with Cincinnati and Chicago.

From the original stretch of 136 miles, railroad trackage in North Carolina has grown to 3748 miles, and in the country at large there now are more than 70,000 locomotives.

Plans for 600-Mile Pipe Line Ready Soon.

The Texas-Empire Pipe Line Co., Tulsa, Okla., organized by the Empire Gas & Fuel Co., a subsidiary of the Cities Service Co., and the Texas Corp., to build a 600-mile pipe line from the Mid-Continent fields to Chicago at a cost of \$15,000,000, announces that plans and specifications will be completed for submission to material and machinery manufacturers and contractors for bids next month. Work will get under way immediately following the award of contracts. The program mapped out calls for the completion of the line by June, 1929.

Adequate Tariff Protection Needed for Domestic Sugar Growers.

OF VITAL IMPORTANCE TO BEET SUGAR AND CANE SUGAR INDUSTRY.

By THOMAS EWING DABNEY.

The farm relief that will best affect the sugar producers of the Southern cane, the Western beet, and the Northern corn states, will be an increase in the tariff on sugar.

Louisiana sugar interests were almost to a man for Hoover; Florida, another sugar-producing state, went Republican; and the vote told its tale in the beet and corn territory.

At the coming session of Congress, the sugar forces are going to marshal an imposing strength to gain further tariff protection. They are better organized than they have ever been.

During the past year, there was formed the Domestic Sugar Producers Association, an organization including the cane producers of Louisiana and Florida, the beet sugar producers of 17 Western and Middle Western states, and the corn sugar (glucose) producers of the 10 large Northern and Western corn-producing states; also the cane planters of Hawaii and Porto Rico, which are American territory. Ernest Burgulieres, a Louisiana planter, was elected president of this organization. Heretofore, these various producing territories have been antagonistic to each other. Each has been working against the other, to its own detriment. The sugar house, however, is no longer divided against itself, and will move upon a strongly Republican Congress with every determination to safeguard its profits by adding another tier to the tariff wall.

The present sugar tariff is \$2.21 a hundred pounds. There are some who wish to increase this tariff \$1. But the probabilities are that the effort will center about \$3. This is only one cent a pound more, and it is pointed out that such an increase would not be burdensome to the consumer. Furthermore, there is the argument that with strong tariff protection, the domestic sugar industry will be encouraged to develop, so that the future will see production on a scale large enough to prevent extortionate prices, such as prevailed in the crisis years of 1920 and 1921, when Cuban raw sugar jumped from 5½ to 23½ cents a pound.

Louisiana's sugar crop this year will total about 175,000 tons. Next year, Louisiana will not fall far short of 300,000 tons. This is about its limit, with the present sugar mills of the state. If more sugar is to be produced, more mills must be erected, and as they cost a million to two million dollars each, to say nothing of the land itself, its preparation, and the equipment necessary to handle a cane crop, it will require fairly certain inducements to tempt sufficient capital into the field to make further developments. Given this encouragement, Louisiana's sugar production could, in a few years, total 500,000 tons; and there are some enthusiasts who see the possibilities of a crop much heavier than that.

Florida, which is this year getting into sugar production on a scale to attract attention, should turn out about 15,000 tons. It seems conservative, now, to forecast an ultimate production of 75,000 tons. Perhaps Florida has possibilities greater than that, but in addition to creating plantations and building mills, which is Louisiana's problem, Florida must also develop a canefield labor, and this is probably the most difficult problem of all; so that Florida's progress must necessarily be slow after passing the 75,000 ton mark.

Beet sugar production in the United States represents an

investment of \$250,000,000, not counting the land on which the beets are produced. The beet sugar production of the United States in 1927 was about a million tons, and about half of the \$120,000,000 of sugar produced went to the farmers. Corn (glucose) sugar a few years ago was a minor product. Last year's production was half a million tons. This sugar is sold only to confectioners. The producers are as interested in tariff protection as the cane producers, because they foresee that with this protection, their production can be considerably increased.

The United States consumes about 6,000,000 tons of sugar a year. Ordinarily, this country imports 60 per cent of its consumption from Cuba. This year, it is conservative to state that it is producing more than half of its requirements in its own cane and beet fields, and in its insular possessions. Estimates are that continental United States will produce 1,152,000 tons, Hawaii 893,000, Porto Rico 748,000 and the Philippines 667,000. Thus, there is a difference only of about 2,500,000 tons between domestic production and domestic consumption. Cuba, last year, exported more than 3,500,000 tons to the United States; its production was restricted to 4,000,000 tons. This year, there is no restriction, and its production may total 5,000,000 tons.

Cuba's sugar production, by the way, has jumped from less than 3,000,000 tons in 1913 to 5,250,000 tons in 1925. Cuba's production costs are under those of the United States, and water transportation is low. Under the present differential (20 per cent reduction) the tariff on Cuban sugar is \$1.76, and Cuban sugar dominates the American market. The extremely low prices of sugar this year are the result of Cuba's heavy production, and this is mighty slim encouragement to the development of the sugar industry in the United States. Sugar is now less than the average of 20 years.

With a \$3 tariff, the rate on the Cuban product, with the same 20 per cent differential, would be \$2.40. Cuban interests are seeking a reduction in the tariff. Cuba is a good customer of the United States, and if part of its production is barred from the United States, the export trade of the United States will suffer, say the Cubans. Furthermore, there is this fact to be taken into consideration—the large investment of American capital in Cuba.

The Philippine situation is adding to the alarm of the domestic sugar producers. Labor and other production expenses of cane in the Philippine Islands are low, much lower than in the United States, yet Philippine sugar comes into the United States duty free. The Philippines have greatly increased their production, and again, there is much American capital invested there. More than half a million tons of Philippine sugar now come to the United States, and it is predicted that within a few years, production will pass the million mark. To meet this menace, the domestic producers have prepared a bill which, if passed, will limit duty-free importation of Philippine sugar to half a million tons a year. These interests say that while the Philippines are, politically, a part of the United States, they are different economically—hence, free trade should not prevail. The same situation does not apply to Porto Rico and Hawaii, for while they ship a good deal of sugar to the United States, duty-free, they have about reached the limits of their production.

New Buildings of Pilot Life Insurance Company.

The home offices of the Pilot Life Insurance Co., now housed in three modern buildings about seven miles from the downtown district of Greensboro, N. C., have been formally opened. The buildings are located on a knoll in the heart of a 132-acre tract and are designed along Colonial Renaissance lines. With the assistance of a management engineer, the architects devised the 3-building unit plan, the central structure being three stories high, the eastern and western buildings two stories. The buildings contain a total floor space of 60,448 square feet, all to be used by the life insurance company and the fire insurance companies with which it is identified.

The buildings are constructed of over-sized brick, a replica of the hand made brick of the Colonial period, and trimmed with Indiana limestone, with carved ornamentation featuring "The Pilot." Halls, corridors and principal offices are in cross-grain birch panelling laid in diamond patterns. Office doors are of the flush panel type, a number are inlaid with ebony and variegated woods. Rooms housing machinery are provided with double walls, heavily insulated and with sound-proof doors. In the X-ray department, walls are treated with barium sulphate to resist the rays of the machine and in the construction of the loft, storage space has been partitioned into convenient areas under the sloping roof. The roof is heavily insulated through the use of 3-inch slabs of gypsum and a 1-inch coat of Celotex in addition to heavy slate. Gutters and exposed metal work are faced with a heavy coating of lead in ornamental designs, the gutters being copper lined.

The eastern building is called Mebane for Cummins S. Mebane, late assistant manager of the McAllister group of fire insurance companies; the central building is called Fackler for David Parks Fackler, the first actuary of the Pilot Life Insurance Company. The former houses the industrial department, accident and health department and the fire insurance group of companies comprising the Pilot Fire, George Washington Fire, Greensboro Fire and the McAllister Underwriters, all operating through the McAllister, Vaughn and Scales General Agency. The central building houses the major departments of the Pilot Life company, the entire plant being served by an automatic carrier which conveys records and business papers to any desired point from a central distributing station. One entire building, known as the Commons, is equipped for the health and comfort of the company's staff. It contains a model cafeteria seating 156, large lounge room and an auditorium seating 350, with a modern stage. A

regulation baseball diamond is being completed, as are two of a series of tennis courts.

The problem of transportation is handled by three large motor buses running between Greensboro and the home offices, in addition to a small fleet of privately owned automobiles. Plans for the buildings were prepared by Zantzinger, Borie and Medary of Philadelphia, and Harry Barton of Greensboro. Harry Arthur Hopf of New York handled the interior arrangements and R. B. Gridland of Philadelphia, was the landscape architect. General contract was executed by the Angle-Blackford Company of Greensboro. The following sub-contracts were awarded:

Brick work—King Bros., Greensboro.
Clocks—International Time Recording Co., Greensboro.
Commercial lighting fixtures—The Miller Co., New York.
Common brick—Borden Brick and Tile Co., Goldsboro, N. C.
Electric wiring—J. L. Griffin Electric Co., Greensboro.
Exterior and ornamental iron and kalamein doors—J. D. Wilkins, Greensboro.
Face brick—Southern Builders Supply Co., Greensboro.
Finished hardware—Odell Hardware Co., Greensboro.
Furniture—Joseph J. Stone and Co., Greensboro.
Glass and glazing—High Point branch of Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Granite and carving—Greensboro Cut Stone Works.
Gypsum roof deck—Lathrop-Hoge Gypsum Construction Co., Cincinnati, O.
Heating—W. W. Dick, Greensboro.
Hollow metal elevator enclosures—W. Fred Casey and Co., Charlotte.
Hollow tile—Merry Bros., Augusta, Ga.
Interior decorative painting—Chapman Decorative Co., Philadelphia.
Kitchen equipment—John Van Range Co., Charlotte.
Laboratory—J. A. Stall, Greensboro.
Landscape work—Sedgefield, Inc., Greensboro.
Lamson carrier—The Lamson Co., Inc., Syracuse, N. Y.
Limestone—Indiana Limestone Co., Bedford, Ind.
Linoleum—W. A. Lippincott, Inc., Charlotte.
Marble, tile, terazzo, slate and cork—The McClamroch Co., Greensboro.
Millwork—Oettinger Lumber Co., Greensboro.
Miscellaneous and ornamental iron—Price-Evans Foundry Corp., Chattanooga, Tenn.
Models—J. C. Lombard Co., Inc., Washington, D. C.
Ornamental lighting fixtures—E. Lewis Dales, Philadelphia.
Painting—John Luppe, Greensboro.
Paving—Robert G. Lassiter & Co., Greensboro.
Plastering—James A. Smith and Son, Durham.
Plumbing—Hunt Bros., Greensboro.
Refrigerating—Home Light and Power Co., Inc., Greensboro.
Reinforcing steel—Greensboro branch of Truscon Steel Co., Youngstown, O.
Roofing and sheet metal—Budd-Piper Roofing Co., Durham.
Slate—Williams Arvonis Slate Corp., Richmond, Va.
Soundproof doors—Irving Hamlin, Evanston, Ill.
Steel casement sash—J. S. Thorn Co., Philadelphia.
Structural steel—Carolina Steel and Iron Co., Greensboro.
Venetian blinds—Norfolk branch of J. G. Wilson Corp., New York.
Ventilating system—Theodore R. N. Gerdes, New York.
Vitraglass—Austin K. Hanks, Greensboro.



RECENTLY COMPLETED GROUP OF INSURANCE BUILDINGS AT GREENSBORO, N. C.

The Advancing South

Big Cold Storage Plant for Norfolk.

Norfolk, Va.—Preliminary work has started on a 6-story reinforced concrete storage warehouse, 90 by 120 feet, for the Jones Cold Storage & Terminal Corp. The company, of which Arthur P. Jones is president, is affiliated with Jones & Co., Inc., established warehouse firm. Barnham Jones is vice-president and treasurer, and W. L. Bentley, Jr., is secretary. Neff & Thompson, of this city, prepared plans for the structure, which will contain 1,000,000 cubic feet of storage space. It will have deep water shipping facilities and be served directly by all railroads reaching this city. Equipment will include two freezers, 10 coolers, ventilating machinery, etc. The company will continue to operate its dry storage terminals, and plans to furnish refrigeration to firms in the vicinity through pipes laid in the streets. Fur storage rooms will be an added feature.

Tulsa Institutions Join \$20,000,000 National Investors Corporation.

Tulsa, Okla.—The Exchange National Bank and the Exchange Trust Co. have become associated with a group of national banking interests in the formation of the National Investors Corp., an investment trust management with an initial capitalization of \$20,000,000. It will be an investment holding company in which separate organizations, with the same management, will specialize in the securities of various industries. The board of directors includes: Robert O. Lord, president of the Guardian-Detroit Bank, Detroit; Walter S. Bucklin, president, National Shawmut Bank, Boston; S. Sloan Colt, vice president, Farmers Loan & Trust Co., New York; Geo. Murane of Lee, Higginson & Co., New York.

Kraft Paper Mill Contracts for Machinery.

Richmond, Va.—Contract for the Kraft paper machinery for the new plant of the Albemarle-Chesapeake Corp. at West Point has been awarded to the Pusey & Jones Co., Wilmington, Del. The new plant will have a daily output of 125 to 150 tons of finished paper, and should be completed within a year. It will employ 300 persons. Pulp will be supplied by the Chesapeake Corp. In addition to the plant proper, which is estimated to involve the expenditure of \$700,000, a \$300,000 power plant will be erected.

\$750,000 Structure for Mobile Bank.

Mobile, Ala.—Bids will be opened this week for a \$750,000 12-story bank and office building for the Merchants Securities Corp., E. F. Ladd, president, after plans by Warren, Knight & Davis, architects, Birmingham, and Owen & Clark, associate architects, this city. Contractors estimating include: Doullut & Ewin, Inc., W. Horace Williams Co., Alabama Engineering & Construction Co., all Mobile; Foster & Creighton Co., C. M. Allen & Son, Smallman Construction Co., all Birmingham.

Cotton Belt Railroad Buys Arkansas Bus Lines.

Memphis, Tenn.—The Cotton Belt Railroad has acquired control of four bus lines operating in Arkansas and plans the organization of a fifth line, all to operate as the Southwestern Transportation Co. The lines acquired are: Smith Bus Line, Pine Bluff to Camden; Bremen Bus Line, Little Rock to Stuttgart and Gillette and from Stuttgart to Pine Bluff; Beakle Bus Co., Camden to Texarkana, and Mathis Line,

Jonesboro to the Missouri state line. The total mileage of the routes is 345. Officials of the new bus subsidiary of the railroad will be: Daniel Upthegrove, St. Louis, president; D. W. Russell, Little Rock, vice president and general manager; C. C. Messick, secretary-treasurer. Operating headquarters will be at Little Rock.

\$250,000 Washington School Contract Awarded.

Washington, D. C.—General contract for the erection of the new 16-room Langdon school here has been awarded to the G. C. Loehler Construction Co., Washington. The new building will replace a frame structure and will cost about \$250,000. A. L. Harris is the municipal architect.

\$300,000 for Sewer Projects at Gretna, La.

Gretna, La.—By a large majority \$300,000 sewer and drainage bonds were voted here on Nov. 6. Henry A. Mentz & Co., Inc., engineers, Hammond, La., have been directed to prepare plans and specifications immediately and to ask for proposals. The improvements will be the forerunner of additional projects planned by the administration under Mayor Charles Gelbke.

\$5,000,000 Municipal Auditorium for St. Louis.

St. Louis, Mo.—Ground will probably be broken within the next 60 days for the erection of a \$5,000,000 municipal auditorium. The arena will seat 12,000 persons. In addition there will be a music hall to seat 3,500, and several smaller halls to seat 750 each. The entire ground floor will be given over to exhibition space and committee rooms. The building will be heated from a municipal power house and the ventilating apparatus will provide for washing the air. Plans and specifications by the Plaza Commission will soon be completed.

Award Subcontracts for Huntsville Hotel.

Huntsville, Ala.—Subcontracts for construction work and for materials in connection with the erection of the \$500,000 Russell Erskine Hotel here have been awarded by E. G. Holladay & Co., general contractors as follows:

Concrete work—Dush Co., Nashville, Tenn.
Ornamental iron work—Price-Evans Foundry, Chattanooga, Tenn.
Structural steel—Decatur Steel & Iron Co., Albany, Ala.
Hollow tile—Birmingham Hollow Tile Co., Birmingham, Ala.
Indiana limestone—Johnson Stone Co., Nashville.
Lumber—Huntsville Hardwood Co.
Steel sash—Truscon Steel Co., Youngstown, O.
Sand, gravel and brick—Huntsville Transfer & Building Material Co.
Reinforcing steel—Connors Steel Co., Birmingham.
Millwork—Rumbrecht, Langlois Co., Nashville.
Stone—Algonite Stone Co., St. Louis, Mo.

Third Unit for Mississippi Insulating and Building Board Plant.

Laurel, Miss.—The Masonite Corp. is erecting the third unit of its plant here for the manufacture of Presdwood and Masonite structural insulating board. The second unit was completed this summer. The enlarged plant will employ about 400 persons, an increase of about 100 over the present force. A high pressure boiler is to be installed, and an 1100-foot well will be drilled.

The company uses sawmill waste in the manufacture of its products, and is now not only buying such material from the Wassau Southern Lumber Co., the Marathon Lumber Co. and the sawmills at Plave, Miss., but locally from the farmers.

The corporation has secured a license to establish a plant in Sweden, which should be completed by next Spring.

IRON, STEEL AND METAL MARKET

Gradual Decline in Steel Production—Sheets to Advance.

Pittsburgh, November 19—[Special.]—Steel mill operations have been tapering off, the rate of steel ingot production last week having been between 85 and 88 per cent, against a 91 per cent rate in October, the peak rate for the second half, and almost exactly level with the first half peak, which fell in April. It is seasonal for production to taper off somewhat at about this time, but a close analysis indicates that the turn has been due partly to October production having been stimulated by extra buying and specifying in September on account of price advances then being put into effect. There is much speculation as to where the rate of steel production will go before it makes the usual upturn, generally seen in the first week or two of January. A fair guess seems to be an 80 per cent rate for the low point. Thus far June has been the low month of the year, with a 76 per cent rate.

The Burlington has ordered 19,500 tons of rails, in addition to 30,000 tons ordered late in September. Last year the road took 60,000 tons. Comparing orders of identical roads there is 6.4 per cent decrease in the buying thus far, the movement being about two-thirds over. The New York Central is the only system that has shown any material increase.

Automobile manufacture has decreased rather sharply and buying of steel indicates that there will be no picking up, except by Ford and Chevrolet, in the near future. The general comparison is very favorable, however, since production in the half year as a whole is very heavy, the seasonal decrease coming late.

Fabricated structural steel lettings reported last week totaled about 55,000 tons, making quite a good week. Altogether there has been hardly as much seasonal decrease as usual in this business, and the 12 per cent lead over last year shown by a nine-month comparison may be increased for the year as a whole.

The season tin plate price has been set, at \$5.35 per base box, 100-pound, an advance of ten cents over the price as reduced 25 cents a year ago. Early expectations were that the cash discount would be reduced from 2 per cent to 1½ per cent, as was done in sheets as of October 1, and that the basis price would be unchanged. The proposal met with strong opposition by can makers, who on account of contracts could not pass on the increased cost, while as the contracts are on a sliding scale an advance in the basis price could be. Contracts are made with jobbers for the quarter and with manufacturing consumers for the half year. Deliveries for the rest of this year continue at the old price.

Substantially all the sheet mills have signified their intention to quote \$2 a ton higher prices on sheets for the first quarter of the new year. Some of them name the advanced prices as being effective on new orders for this year's delivery, but such statements are taken with some grains of allowance. Including the advanced prices the market range is 2.90 to 3.00 cents on tin mill black, 2.75 to 2.85 cents on black sheets, 3.50 to 3.60 cents on galvanized sheets, 4.00 to 4.10 cents on automobile sheets and 2.00 to 2.10 cents on blue annealed. Base gauges are: tin mill black, 28; black and galvanized, 24; automobile, 20; blue annealed, 10. Hot rolled strips will no doubt be advanced correspondingly. Cold rolled strip makers have already announced a first quarter advance, from 2.85 to 2.95 cents.

Valley pig-iron producers seem to be holding their recently

advanced asking prices quite firmly, but not much tonnage is moving. Buyers in general are well covered for a time and they are indisposed to take hold for later deliveries until forced. Meanwhile sales at the full prices may perhaps represent what amounts to a delivery premium. A new development is that some of the steel works are again willing to sell pig-iron as the requirements of their steel departments have decreased.

The scrap market is a shade easier but is not quotably lower, heavy melting steel remaining quotable at \$17 to \$17.50. Two mills have bought at \$17 but dealers short at another point are paying \$17.25 to cover.

Copper Spectacular With Continued Bright Outlook—Zinc Steady—Lead Business Good.

New York, November 19—[Special.]—Developments in the copper industry were again spectacular last week, particularly from the standpoint of October statistics and rises of the copper shares on the stock exchanges. New records were made in two departments of the statistics: First, total shipments for the month of 155,363 tons, which broke the previous record in August of this year by 8 per cent; second, domestic shipments which at 100,371 tons were 13 per cent in excess of the previous record in September of this year.

Coppers appeared as one of the speculative favorites of the investing public. Though copper production is increasing rapidly it will probably be three or four months before the supply becomes more nearly normal and meanwhile another advance in selling price could be engineered easily by the producers. If copper prices are reduced it will probably not be before at least six months have elapsed and the earnings outlook is therefore bright for some months to come.

The other metals have not been getting anywhere particularly or doing anything of special significance. The strength of the tin market in the face of statistics which are unfavorable suggests other forces at work to buoy up the market. It is believed that those traders who are agents for the recent combines of producers have been manipulating the tin market upwards. Much tin has been removed from the market as though a corner were being attempted, though no one believes an actual corner will result. As a general rule the producers of tin are bullish on the market whereas the traders are for the most part bearish. The first part wishes to get the price of tin stabilized at £275 whereas the traders want a level of around £200.

The long period of stability in the lead market was broken early in the week when the American Smelting & Refining Co. reduced its contract price \$3 per ton to the quotation of 6.35c, New York, the price in the East St. Louis market dropping less sharply to 6.20c per pound. The reduction was not due to any weakness in the American market but rather to a series of declines at London which was starting to divert Mexican lead to the American markets rather than to Europe.

The zinc market is still steady at 6.25c, East St. Louis. Some wit has stated that the price is as unchanging as the specific gravity of the metal which is 7.125. The minor metals are in rather a stable condition. However 1½c has been lopped off the price of antimony which now sells at 10½c per pound, the weakness being due to the lesser demand on the part of the automobile battery makers. Platinum prices have been unchanged for several months following a speculative flurry which took prices up rapidly and brought them down the same way. Silver fluctuates around 58c and is at that exact figure much of the time.

The spread in prices of quicksilver has been narrowed, the present range being \$123 to \$125 per flask.

Some expected the copper market to boil following the issuance of October statistics. In the first place surplus stocks of refined metal were reduced over 6,000 tons to an aggregate of 45,648 tons which compares with 83,882 tons a year ago. This further shrinkage in the surplus was unlooked for. This, then, might have started another stampede to buy. However, the increasing production rather offset this factor. Refined output in October was 12,000 tons higher than in September and September output had been 7,000 tons above that of August.

Purchasing of copper has been moderate over the past week. Nearly all of the January production is sold out and probably about a third of the February needs. Producers are not yet willing to book so far ahead as March. Buying on the part of foreign users has been rather light, averaging 1,500 tons daily. At the same time some carload lots of November and December copper have been bought during the past week to piece out the stocks of consumers and to take care of extra business.

Following upon the heels of the announcement of the electrification of the Pennsylvania Railroad came the news that the Reading and the Delaware, Lackawanna & Western are to do some electrifying, this of course to consume large quantities of copper, both in locomotives and transmission lines.

The announcement has been made as to the date for the starting of the National Metal Exchange. This will be December 3 at which time the New York Metal Exchange, which is a half century or more old, will be discontinued. The present price of prompt tin is 50c per pound, which is 5c higher than the low of this year. Sales in this country averaged 200 tons daily. Consumers have done considerable purchasing despite the higher prices.

Lead business is even more than satisfactory. Sales are better than normal and the reduction in price would give a false impression to those who did not realize the real cause. Surplus stocks are very small and December needs not yet well taken care of. Zinc statistics for October were favorable, showing extra large shipments, a decline in surplus stocks and a decrease in the number of active retorts. Though day-by-day zinc business has seemed small the aggregate sales over a longer period of time shows some increase.

Pig Iron Advances and Renewed Buying Results— Production Steady.

Birmingham, Ala., November 19—[Special.]—Consumers of iron have been waiting the opening of books and selling into the first quarter of the coming year by furnace interests. The latter have been holding off until the last moment, feeling confident that when a higher base price was named it would be accepted by the melters of iron, advances having been made in every other iron-making district and in some instances two changes upwards having been put into effect. At \$16.25 per ton, No. 2 foundry, Alabama producers have been selling steadily for delivery through the remainder of the year.

Production has been steady. Eighteen furnaces have been making pig iron, all but five on foundry iron. The steel makers have been participating a little in the open market, producing foundry iron, as well as using some of that product themselves. There was a small amount of foundry placed on the surplus stock yards the past month.

Some of the steady melters of pig iron are not as active as 30 days ago, notably the cast iron pressure pipe makers. Smaller melters, however, have been operating and moving out their various products. The smaller tonnages mount up

in the course of time and as a consequence the statement is made that the iron market has been satisfactory.

Optimism is expressed in furnace circles as to the coming year. Several inquiries have been received as to foundry iron for first quarter delivery and replies have been made that the orders will be booked at prices obtaining at that period. Further offers were received the past week for tonnages at prices under and equal to the base price obtaining for several weeks.

While there is some debate as to the extent of the demand for cast iron pressure pipe the coming year, developments are under way which will make it possible to produce a larger quantity than ever before.

Steel is maintaining a steady position, everything considered. In wire and nails and a few other shapes there has been a little lull for two weeks, but in sheet, structural, plate, track fastenings and other things there has been much activity. Advance in sheet prices has been intimated. Plate is in good demand, as local fabricators receive business from the oil fields of the Southwest for storage tanks. Structural steel contracts also are quite numerous, though in smaller tonnages.

Gulf States Steel Company is finishing up its program of betterments, expansions and extensions, a new, modern power plant having been installed at Gadsden, this to be operated with the gas from the recently rebuilt blast furnace and in return furnishing power not only for operating the finishing mills but also wind for the blast furnace, a combination that is proving profitable. Plans are already being given consideration for further expansion by the Gulf States, more finishing mills being proposed, a further diversification in steel products being aimed at. Upwards of \$3,500,000 was expended this year in the expansions and betterments and a like sum is assured for the work the coming 18 months.

Coal shows improvement, though slight, in both steam and domestic. Estimates of a 17,500,000 tonnage this year in the coal fields of Alabama are unchanged. Coke production is slightly better and the market is firmer, \$5 being maintained as the base price. Scrap iron and steel is fairly good. The better quality of heavy melting steel brings \$12.50 per ton and general or lower quality, as it is termed, \$10 to \$10.25.

Pig iron and iron and steel scrap quotations in the Birmingham district follow:

PIG IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$16.25; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$16.75; iron of 2.75 to 3.25 per cent silicon, \$17.25; iron of 3.25 to 3.75 per cent silicon, \$17.75; charcoal iron, f. o. b. furnace, \$29.00.

OLD MATERIAL.

| | |
|---------------------------------|--------------------|
| Old steel axles | \$16.00 to \$17.00 |
| Old iron axles | 16.00 to 17.00 |
| Old steel rails | 12.00 to 13.00 |
| Heavy melting steel | 10.25 to 12.50 |
| No. 1 cast | 14.50 to 15.00 |
| Stove plate | 13.00 to 13.50 |
| No. 1 railroad wrought | 9.50 to 10.50 |
| Old car wheels | 12.00 to 12.50 |
| Old tramcar wheels | 12.50 to 13.00 |
| Machine-shop turnings | 9.00 to 9.50 |
| Cast-iron borings | 9.00 to 9.50 |
| Cast-iron borings (chem.) | 13.00 to 13.50 |

Later: Pig iron quotations have advanced 25 cents immediate and future delivery, with another advance imminent shortly. Selling showed renewed life at the new price.

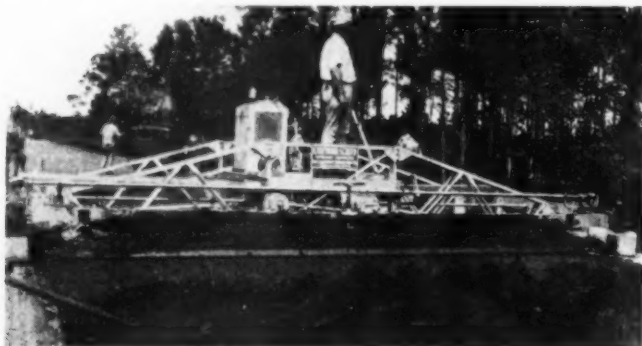
To Make Wood Preservative at Jacksonville, Fla.

The Curtin-Howe Corp., timber preservation engineers, New York, have closed a contract with Eppinger & Russell Co., Jacksonville, Fla., to use the "ZMA" process for wood preservation, and will install there a small mixing plant for the manufacture of the preservative. This is the third unit the Curtin-Howe interests have built in the South; the first is at Hattiesburg, Miss., and the second at Augusta, Ga. The "ZMA" treatment was developed by the Western Union Engineering Laboratories.

GOOD ROADS AND MOTOR TRANSPORT

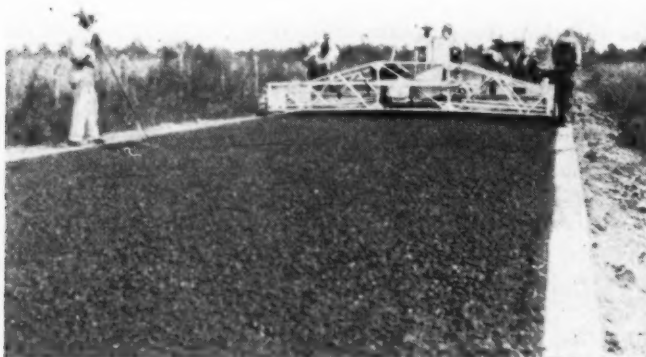
Machine-Finishing Asphalt Resurfacing of Macadam Highway in Georgia.

The MacDougald Construction Co., Atlanta, is resurfacing 12 miles of road in Ware County, Georgia, northwest of Waycross. Originally built as a penetration macadam job, the old road was badly worn by heavy traffic in the past few years; it is accordingly being resurfaced with sheet asphalt



RESURFACING THE ROAD.

18 feet wide. In places, this involves the construction practically of a 3-course road—first a binder course to even up the irregularities developed in the old surface; on top of this binder is laid the black base and finally the sheet asphalt top. A Lakewood type C screed is being used on both the base and top courses of the asphalt for spreading and sur-



IN WARE COUNTY, GEORGIA.

Putting an asphalt surface on a 12-mile highway.

facing; it is said this machine provides a smoother surface than it has been possible to obtain by hand methods and that it also increases production materially with a consequent saving in labor.

The work is being done under the direction of the Georgia State Highway Department. C. E. Coulson is superintendent for the contractor and M. C. Mathews is foreman.

Need for Wide Rights-of-Way.

Edward N. Hines, for 21 years a member of the Board of County Road Commissioners of Wayne County, Michigan, and known as the "grandfather of concrete roads in America," recently declared that the nation's greatest highway need is the immediate acquisition of wider rights-of-way and the widening of all main pavement arteries.

Mr. Hines was guest of honor at a meeting attended by Chicago highway leaders and sponsored by the Chicago Regional Planning Association. He is said to have built the first concrete road in the country just outside of Detroit

in 1909 and this road has been continuously in service for 18 years.

In 1909 concrete had been used sparingly for city streets, but not for rural roads, and there were barely 50 miles of concrete pavement in the United States. It is estimated that by the end of 1928 this country will have over 80,000 miles of concrete roads, streets and alleys.

The Wayne County Board of which Mr. Hines was the first chairman, and on which Henry Ford served for several years, was the first to develop a continuing plan of highway improvement, the first to put this plan under construction and the first to conceive the idea of separating traffic at highway intersections, it is stated. There are over 500 miles of concrete roads now in service in the Wayne County system. The 204-foot width of right-of-way has become a standard in that county and on many of these highways two strips of concrete 20 feet or more in width have been laid to carry traffic in each direction, with an open strip down the center for rapid transit.

To Award Contract for Birmingham Viaduct.

Birmingham, Ala.—Bids for erecting the Twenty-second Street Viaduct will be opened December 11. It is the first of a series of projects planned by the City and the Louisville & Nashville Railroad and the Southern System, to involve the expenditure of \$4,000,000. The L. & N. Railroad was named as agents to receive the bids. The engineering commission to supervise the work includes: City Engineer Hawkins, B. Herman, chief engineer of the Southern Railway, and Edward Wise, Jr., special engineer of the L. & N.

Missouri Votes \$75,000,000 Road Bonds.

Jefferson City, Mo.—A proposal to issue \$75,000,000 of bonds to complete the 7640-mile road system of the state was approved at the recent general election in Missouri, according to the completed tabulation of votes. The proposal maintained a lead in nearly all out-state sections, while the vote in Kansas City and St. Louis was largely in the affirmative.

\$750,000 Paving Program in San Antonio.

San Antonio, Tex.—Paving on 17 streets in this city to involve an expenditure of approximately \$500,000 will soon be started, according to an order of the City Commission. This work will represent the first unit of a \$750,000 paving program, which was included in a bond issue of \$4,750,000 voted last spring.

Buncombe County to Sell \$3,250,000 Bonds.

Asheville, N. C.—Two bond issues, aggregating \$3,250,000, will be sold by Buncombe County on December 1. A \$2,250,000 issue will be designated as road and bridge bonds, while a \$1,000,000 issue will be known as courthouse and jail bonds. Proceeds will be used to retire short term anticipation notes that mature next month.

\$500,000 West Virginia Road Bonds Sold.

Charleston, W. Va.—Governor Howard M. Gore has sold \$500,000 4 and 4½ per cent highway bonds to C. T. Williams & Co., Baltimore, and Estabrook & Co., New York, bids for which were opened November 13.

The Lauderdale County Hard Roads Commission, Ripley, Tenn., plans to build 90 miles of gravel road at a cost of \$1,000,000, contracts for 35 miles of which have already been awarded.

\$140,000,000 VOTED FOR HIGHWAYS BY THREE SOUTHERN STATES.

Other States Considering Bond Issues—Great Volume Road and Bridge Work Assured.

At the recent general election four states voted highway bond issues totaling \$240,000,000, and of this amount \$140,000,000 was approved by voters in three Southern States—Louisiana, Missouri and West Virginia. On the same day highway bond issues totaling \$110,000,000 in Pennsylvania and Colorado were defeated, and California failed to approve an issue of \$10,000,000 bonds for eliminating grade crossings.

The most significant of the elections was the approval of \$75,000,000 highway bonds in Missouri, a previous issue of \$60,000,000—practically all of which has been expended, having been voted in 1920. This new issue provides for the completion of the 7640-mile state highway system in a state strategically located in the nation's network of important highways; assures widening of roads in congested areas around St. Louis and Kansas City; limits the gasoline tax to two cents and motor fees as at present for a period of 10 years. About 300 miles of highways are to be added to round out the present system and to connect state parks, and a supplementary highway system, known as farm-to-market roads, will be inaugurated.

It is expected that an enabling act to make effective the provisions of the bond issue amendment will be passed by the next General Assembly early in 1929, and after the approval of the act 90 days must elapse before it becomes a law. The printing and signing of the bonds, and the time required for advertising will possibly consume another two months; so that it will be some time during the fall of 1929 before the bonds will be placed on the market. Contracts will probably be let in the latter part of 1929 against this revenue; however, it is unlikely that any construction work will begin until the season opens in 1930. It is planned to sell the bonds at the rate of \$15,000,000 a year.

In West Virginia a \$35,000,000 highway bond issue carried by a big majority. Louisiana voters approved the issuance of \$30,000,000 to finance road and bridge projects.

Iowa voted a \$100,000,000 road bond issue, one of the largest yet to be voted by any state. County bonds are to be paid off as they become due, and about \$35,000,000 of a total of \$43,000,000 county road bonds will fall due in the next six years, constituting the life of the state's construction program as now mapped out. These bonds will be paid off, and in the meantime state bonds will be issued to carry out construction work, thus releasing primary road funds for the payment of county bonds. In this way state credit will gradually be substituted for county credit.

The indicated change in the position of states in financing is in the policy adopted recently of many states to finance construction of their major highways, rather than to permit the work to go forward in disconnected projects by counties and road districts. Back of the success of this policy lies the gas tax, which is now used to finance road building in all but two states, and is accepted generally as the most practical, economical and equitable means of raising funds for maintaining and building highways.

Bond issues for state highways systems are being advocated in Georgia, Mississippi and Alabama. In Texas a movement is under way, which apparently is gaining momentum, to put into effect the largest of all highway building plans—the voting of a bond issue of \$300,000,000 and over. In Florida consideration is being given to the issuance of state bonds for the purpose of giving state aid to the various counties.

"The 'pay-as-you-go' method of building highways is being supplemented by the 'pay-as-you-ride' policy which carries

with it the refinements that mark the modern automobile as compared with the high wheeled auto buggy of the whip-socket era," states E. E. Duffy, of the Portland Cement Association, in discussing the present trend in highway financing. He points out further:

"Since 1916, states have passed road issues totaling \$1,159,836,000 while from 1919 until this fall, counties voted issues amounting to \$985,417,000. Several counties passed issues November 6, including that of Will County, Illinois, for \$1,750,000 and that of Armstrong County, Pennsylvania, for \$1,500,000.

"Installment buying, for such it is, has proven to be as desirable to the conduct of government as to individuals who pay for radios, automobiles, washing machines, and so on, by means of future earnings. Bond issues bring large sums of money with which highway improvements are immediately constructed so that the motorist and taxpayer, usually the same person, may save money directly in car operating costs, and indirectly through lowered road upkeep costs paid out of state funds.

"Road bond issues are usually financed entirely by gasoline tax revenues and motor license fees. Highway economists point out that where motorists pay out from \$9 to \$15 in gasoline taxes per year, based on an average use of 300 gallons, the actual return to the motorist through highway benefits will exceed this several times over.

"By 'paying as you ride' highway conveniences of a decade or so hence are available for current use and at no greater cost, for poor roads cost from one to three cents more a mile to drive over. The saving possible here more than offsets that bugaboo, interest on bonds."

Program for Research Board's Annual Meeting.

Roy W. Crum, director of the Highway Research Board of the National Research Council, announces an elaborate program for the eighth annual meeting to be held at the National Academy of Sciences and National Research Building, Washington, on December 13 and 14.

A. T. Goldbeck, chairman of the Committee on Structural Design, will present a report with data for the practicing engineer, and it is hoped to include practical methods for taking care of unusual drainage and subgrade conditions, as well as methods for design of rigid and non-rigid pavements, covering cross section, reinforcing, joints, dowel spacing, edge strengthening, and design of secondary roads. Reports on new developments on finishing bituminous surfaces, analyses of soils, settlement in peat marshes, and factors to be considered in the correlation of soil and pavement conditions will be made.

H. S. Mattimore, chairman of the committee on Character and Use of Road Materials, will discuss research work upon which the Pennsylvania design for guard rail is based, and the properties of bituminous materials for surface treatments.

G. E. Hemlin, chairman of the committee on Highway Traffic Analysis, will discuss the relation of traffic to accidents. Dean Johnson will present an illustrated report on a traffic survey made from airplanes along the Washington-Baltimore Boulevard. A review of the methods used in various states in financing state highway systems will be presented by a committee headed by H. J. Kirk.

Recommendations concerning the Model Municipal Traffic Ordinance and Model Motor Vehicle Law of the National Conference on Street and Highway Safety will be made by a committee of which A. N. Johnson is chairman. T. R. Agg, chairman of the committee on the Economic Theory of Highway Improvement, will present an appropriate subject.

G. C. Dillman, chairman of the Maintenance Committee, will report on a wide variety of subjects including: Crack fillers for concrete pavements; dust prevention and surface treatment and gravel; bituminous wearing surfaces for gravel roads; earth roads oiling; bituminous treatment of earth, sand clay and top soil roads, etc.

TEXTILE

Rushing Work on Viscose and Acetate Rayon Plants at Rome, Ga.

American Chatillon Corp. Completing Units to Produce 18,000 Pounds Daily—To Build 350 Houses and Community Center.

Rome, Ga.—Rapid progress is being made in the construction of the two rayon plants here for the American Chatillon Corp., under the supervision of Lockwood Greene Engineers, Inc. The acetate plant is practically finished and machinery and equipment is being installed, so that the plant will be ready for operation about the end of February. Work on the viscose plant is also going forward rapidly. The foundation, steel construction, filter plant, roads, etc., are completed and the brick work is about 50 per cent completed. This plant should be ready for operation in March. Installation of machinery in the viscose unit will begin December 15. The power house, the machine shop and the storage house have all been completed.

When these two plants are operating at capacity the American Chatillon Corp. will produce 6000 pounds of acetate rayon yarn and 12,000 pounds of viscose rayon yarn daily. Within a year it is proposed to double the output by the erection of other units. The company announces that the rayon to be produced will be of the multifilament fine denier type and attention will be given to quality rather than to quantity.

The corporation is now issuing plans for the construction of a complete mill village consisting of about 200 houses for the employees and about 150 houses for the engineers, managers, foremen, etc. Together with these there will be a large community center and possibly stores for the convenience of employees.

Contracts awarded for construction, etc., have been let as follows:

Railroad siding—Southern Railway.
Excavating and grading—Nichols Contracting Co., Atlanta, Ga.
Lumber—Marsh & Truman Lumber Co., Chicago.
Filter plant—Roberts Filter Co., Darby, Pa.
Photographs—Aven Lively, Atlanta.
Unloading lumber—W. H. Mitchell, Rome.
Steel and its erection—McClintic-Marshall Co., Pittsburgh.
Coal handling equipment—Guarantee Construction Co., New York.
Boilers—Babcock & Wilcox, New York.
Stokers—Westinghouse Electric & Manufacturing Co., East Pittsburgh.
Chimney—Alphons Custodis Chimney Construction Co., New York.
Foundations—A. K. Adams Co., Atlanta.
Fence—Page Steel & Wire Co., Bridgeport, Conn.
Pumps—A. & S. Cameron Pump Works, New York.
Air conditioning equipment—Carrier Engineering Corp., Newark, N. J.
Steam turbines—Westinghouse Electric & Manufacturing Co.
Brick work, roofing, windows, doors, sash, concrete floors, machinery foundations—Hughes-Foulkrod Co., Philadelphia.
Ash hoppers—Allen-Sherman-Hoffman Co., Philadelphia.
Machine shop—R. S. Armstrong & Bro. Co., Atlanta.
Breeching for power house—J. S. Schofields Sons Co., Macon, Ga.
Electric conduits—Walker Electric & Plumbing Co., Atlanta.
Holisting cranes—Box Crane & Hoist Corp., Philadelphia.
Elevators—Weekley Elevator Co., Atlanta.

Machinery contractors include:

Refrigerating equipment—De LaVergne Machine Co., New York.
Dryers and trucks—Proctor & Schwartz, Inc., Philadelphia.
Steel and copper mixers—E. B. Badger & Sons Co., Boston, Mass.
Monorail system and Toledo dial scales—American Mono Rail Co., Cleveland.
Dry vacuum pumps and motors—Chicago Pneumatic Tool Co., New York.
Dryers, dust collectors, etc.—Buffalo Foundry & Machine Co., Buffalo, N. Y.
Spinning machines for viscose unit—Moncalvi & Co.
Pneumatic conveying system—Sprout, Waldron & Co., Muncy, Pa.
Piping for Building "A" and power house, water and steam distribution, heating, etc.—Grinnell Co., Providence, R. I.

Anderson Hosiery Mills Plan Expansion.

Anderson, S. C.—Plans are being considered by the Anderson Hosiery Mills, C. G. Sayre, president and treasurer, for the expansion of the plant and an increase in production from 700 pairs of mercerized lisle hose daily to 1200 pairs.

Contracts Let for Asheville Rayon Plant.

Asheville, N. C.—Through the New York office of Lockwood Greene Engineers, Inc., contracts have been let as follows in connection with the erection of the huge rayon plant near here of the American Enka Corp.:

Boilers, superheaters, etc.—Babcock & Wilcox Co., New York.
Stokers—Riley-Sanford Stoker Corp., New York.
Turbines—Allis-Chalmers Manufacturing Co., Milwaukee, Wis.
Refrigerating equipment—De La Vergne Machine Co., New York.
Filter plant equipment—International Filter Co., Chicago.
Air compressors and vacuum pump—Chicago Pneumatic Tool Co., New York.

\$300,000 Hosiery Mill for Pulaski, Va.

Pulaski, Va.—Plans are being prepared by Wm. Steele & Sons Co., Philadelphia, for a \$300,000 hosiery mill to be erected here by the Virginia Maid Hosiery Mills, Inc., recently organized with the following officers: President and treasurer, T. J. Wallner; Harold Lichten, Philadelphia, vice-president; John S. Draper, secretary. They, with T. C. Coleman, J. F. Wysor, R. L. Beamer, E. W. Calfee and J. P. Miller, comprise the directorate. The first unit will be 88 by 102 feet, in addition to a boiler house and dye plant, all of brick, concrete and steel. Reading full fashioned machines will be installed, to produce 300 dozen pairs daily. About 100 persons will be employed initially.

Xylose a New Product From Cotton Seed Hulls.

The discovery of a product called xylose in cotton seed hulls, and its extraction at a cost of a few cents per pound, as compared with the market price of about \$100 per pound, was attributed by a recent news dispatch to the Bureau of Standards of the U. S. Department of Commerce. The hulls, said the dispatch, were 40 per cent xylose, and an inference possible to be drawn was that large fortunes were about to be reaped by cotton-seed producers.

Inquiry at the Bureau of Standards has developed the following information:

"Not the cotton seed hulls but the cotton seed bran contains 40 per cent by weight of xylose. The bran is defined as the hull after all fiber of whatever kind has been removed therefrom. (Hulls are 80 per cent bran, and therefore contain 640 pounds of xylose to the ton.)

"Quotations from chemical manufacturers last month indicated a price of something over \$101 per pound for xylose but there were only 50 grams available in the country even at this price. In other words, xylose is a museum curiosity.

"We do not care to estimate the cost of producing xylose by our process at present because we have nothing but laboratory data to go on. We expect to build a semi-commercial plant in the near future and hope to get from this some idea of the costs within the next few months.

"Unquestionably, the development of our process on a commercial scale will cause the price of xylose to drop to a point at which this price will include only a reasonable profit.

"The success of the whole proposition depends upon finding a market for large quantities of xylose. This can be found all right if xylose can be made to sell at a price in competition with other things now being used for the same purpose. We believe this can be done.

"We believe that we can make trioxylglutaric acid from xylose and that this acid can compete on a price basis with tartaric and lactic acids and can compete on a quality basis with acetic acid."

NEW AND IMPROVED EQUIPMENT

Hand Transfer Pump.

When transferring liquids of a volatile nature, there is an ever-present danger of fire and explosion and careful consideration of every safeguard procurable in selecting pumping equipment is necessary from a standpoint of protection of property and investment and as a safeguard against loss of life. Volatile liquids generate static electricity when being transferred from one container to another, or when being run through a rubber hose.



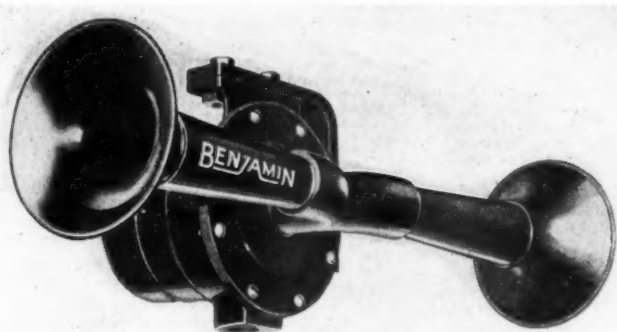
"TRAHERN" PUMP.

In describing its new Trahern fireproof, hand transfer pump, the George D. Roper Corporation, Rockford, Ill., says that every part that comes in contact with the liquid being pumped is made of materials which are absolutely non-ferrous, non-static and non-corrosive. It is guaranteed by the corporation to be vapor-proof, fire-proof and explosion-proof. The pump is used for transferring highly volatile and inflammable liquids, with safety and convenience; it is said that one can build a fire around this pumping outfit and still have no fear of explosion.

The pump is of compact and simple construction and is declared by the manufacturers to be of the correct hydraulic principle for hand operation with volatile liquids. The case is made of special grade aluminum; and face plate, back plate, rotor, blades and blade springs are made of brass with a special solvent-resisting packing.

Motor-Driven Signal.

A motor-driven signal manufactured by the Benjamin Electric Manufacturing Company, Chicago, Ill., is said to be of remarkable carrying and penetrating power, having a resonant, one-tone blast, which is easily distinguished and commands attention in the noisiest industry. It is stated to be



DOUBLE HORN PROJECTOR TYPE.

especially of use in such locations as steel mills, railroad shops, foundries, cotton mills, screw machine departments, and machine shops, where a signal must compete for attention with excessively loud manufacturing noises.

Outdoors it will carry a quarter of a mile under favorable conditions. Indoors, in actual test in an extremely noisy machine shop, this signal was distinctly heard all over an

area of 10,000 square feet. Both single and double horn projector types are available, and catalog No. 8180 describes the double projector type.

Two advantages are the employment of rubber gaskets, insuring weatherproof qualities, and the minimum amount of care and adjustments required. The motor rarely needs adjusting oftener than once a year and self-feeding oil wick cups require refilling once in the same period. Also, the motor-driven signal is efficient on code calling systems, whether controlled by a push button or by an automatic calling device. The signal is wired with 14-inch leads.

Construction Equipment Merger.

A combination in the construction equipment field has been announced by Philip A. Koehring, president of the National Equipment Corporation, in the acquisition of the Parsons Company, Newton, Iowa, manufacturers of power trench excavators, and the Insley Manufacturing Company of Indianapolis, manufacturers of steel towers for hoisting and pouring concrete. Both companies will continue under their present management as divisions of the National Equipment Corporation. H. C. McCardell, president of the Parsons Company, and W. H. Insley, president of the Insley Manufacturing Company, have become vice-presidents and directors of the parent corporation. The National Equipment Corporation now owns the Koehring Company, T. L. Smith Company, Insley, and Parsons, with total assets of \$9,000,000 and 1928 sales close to \$10,000,000.

The officers and directors of National Equipment Corporation are: Philip A. Koehring, president and treasurer; W. J. Koehring, vice-president; W. H. Insley, vice-president; Harold E. Smith, vice-president; H. C. McCardell, vice-president; W. J. Zimmers, secretary; J. E. Uihlein, R. A. Uihlein, Willits Pollock and J. W. Kieckhefer, directors.

The National Equipment Corporation was organized in 1927 by Philip A. Koehring and associates, to acquire the ownership of companies manufacturing construction machinery. Headquarters are located in Milwaukee, where are also the T. L. Smith and Koehring plants. The Koehring Company was organized in 1906 with an original investment of \$15,000 by William J. Koehring, Philip A. Koehring and Richard Kiel. The T. L. Smith Company was started by T. L. Smith in 1900, and the W. H. Insley Manufacturing Company has been developed by Mr. Insley from a steel fabricating and jobbing business. The Parsons Company was founded at Newton, Iowa, by George Parsons, engineer and inventor, who also invented the Maytag Washing Machine.

Survey of Commercial Stocks of Coal.

Commercial stocks of bituminous coal, used largely for industrial purposes, amounted to 41,100,000 tons on October 1, 1928, according to a survey by the United States Bureau of Mines. In comparison with the amount reported on July 1, the date of the last previous survey, this is a decrease of 600,000 tons. The stocks on October 1 compare favorably with the average for this season in other recent years.

Exports during the third quarter of 1928 averaged 399,000 tons a week against 270,000 tons in the previous quarter and 351,000 in the third quarter of last year. The weekly rate of home consumption averaged 8,246,000 tons, slightly less than in the corresponding period a year ago.

In addition to the stocks in the hands of consumers there were 9,443,011 tons of bituminous coal on the docks of Lakes Superior and Michigan.

CONSTRUCTION DEPARTMENT

EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained.

The date at the end of an item indicates issue of the Manufacturers Record in which earlier facts about the same enterprise were published.

DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$30.00 a year.

Airports, Airplane Plants, Etc.

Miss., Hattiesburg—City plans \$25,000 bond issue for airport.

Miss., Natchez—Natchez Exchange Club interested in establishing airport.

N. C., Chapel Hill—North State Aircraft Co., capital \$100,000, incorporated; George A. Noah, Yawger Pickell.

Okla., Muskogee—City votes Nov. 27 on \$195,000 for airport; includes ground and hangars complete for triple A port.

Tex., Dallas—Dallas Aviation Industry formed, with W. H. Long, Pres., by consolidation of Southern Airways, Love Field Drive, and Dallas Aviation School; capital \$100,000.

Tex., Galveston—City offered government 5000 acres of land for army air service.

Bridges, Culverts and Viaducts

Proposed Construction

Ala., Birmingham—War Dept., Washington, D. C., approved plans Jefferson County Bd. of Revenue for bridge across Locust Fork of Black Warrior River 1½ mi. northeast of Porter; under State law.

Ala., Heflin—State Highway Comn., Montgomery, receives bids Dec. 5 for bridges and culverts between Oxford, Calhoun County, and Heflin, Cleburne County, 76,900 lb. rein. steel; Woolsey Finnell, Highway Director.

Ala., Mobile—State Highway Comn. plans several bridges. See Roads, Streets, Paving.

Ala., Riverside—Alabama State Bridge Corp., Montgomery, will start construction Coosa River Bridge, Riverside, Saint Clair County, early in Dec. 8-30

Fla., Collier City—War Dept., Washington, D. C., approved plans Collier County Comms., Everglades, for bridge across Big Marco River southeast of Collier City.

Fla., Jacksonville—City Comn., M. W. Bishop, Sec., receives bids Dec. 17 for bridges across McCoy's Creek at Riverside and at Myrtle Ave. and at Stockton St.; culverts at Leeland, at Smith and at Fitzgerald St. in connection with McCoy's Creek improvement.

Fla., Olympia—War Dept., Washington, D. C., approved plans Martin County Comms., Stuart, to reconstruct bridge across Jupiter Narrows east of Olympia. 11-15

Fla., Pensacola—English Construction Co., 15 W. 91st St.; Austin Engineering Co., 556 Southern Blvd., both New York City; C. H. Turner Co., Brent Bldg., Pensacola; Soule Contracting Co., Box 617, Atlanta, Ga.; General Construction Co., Planters Bldg., St. Louis, Mo.; Virginia Engineering Co., 322 28th St., Newport News, Va.; Siems, Helmers & Schaffner, Inc., 1014 Guardian Life Bldg., St. Paul, Minn.; Hall-Hodges Co., Inc., Citizens Bk. Bldg., Norfolk, Va.; Kilby Car & Foundry Co., 630 W. Tenth St., Anniston, Fla.; Carpenter & Petrie, Citizens Bk. Bldg., Norfolk, Va.; Luten Bridge Co., York, Pa., all prospective bidders for 1800-ft. rein. conc. Bayou Grande Bridge between Pensacola and U. S. Naval Air Station; bids opened Dec. 5. 11-1

Kentucky—State Highway Comsn. receives bids for 2 bridges. See Roads, Streets, Paving.

Ky., Louisville—Louisville Bridge Comsn., William Black, Chmn., receives bids Dec. 12 for approaches to bridge over Ohio River: 20,000 lin. ft. conc. foundation piles, 8000 sq. yd. conc. roadway on grading, 7300 sq. yd. rein. conc. roadway and 1850 sq. yd. conc. sidewalks, both on struct. steel; 3000 sq. yd. conc. sidewalks on grading, 3300 lin. ft. granite curb, 3,200,000 lb. struct. steel, 200,000 lb. rein. steel, 132,000 lin. ft. roadway rein. trusses; Ralph Modjeski and Frank M. Masters, Engrs., Keystone Bldg., Harrisburg, Pa.

Louisiana—Louisiana Highway Comn., Baton Rouge, receives bids Dec. 18 for 2 bridges: Richland Parish—778.65-ft. Boeuf River Bridge, near Girard, on Rayville-Monroe Highway, 250-ft. steel high truss fixed span, seven 25-ft. approach spans on west; 200 tons of steel; Morehouse-Richland Parishes, reconstruct Lake Lafourche Bridge, Oak Ridge-Rayville Highway; eleven 25-ft. panels of timber pile trestle; J. M. Fourmy, State Highway Engr.

La., New Orleans—Commission Council construct \$30,000 conc. culvert to replace present wood one over People's Ave. Canal on Chef Menteur Highway.

La., Starks—Louisiana Highway Comn., J. J. Burke, Bridge Supt., Baton Rouge, will build bridge over Vinton Canal near Starks, Calcasieu Parish.

Md., Ellicott City—State Roads Comn., Baltimore, received low bid from Forbes-Murphy Construction Co., 406 St. Paul St., Baltimore, \$9,469 for single span rein. conc. bridge over Deep Run, along Baltimore-Washington Blvd., near Waterloo, Howard County. 11-8

N. C., Currituck—Currituck & Dare Bridge Corp., L. C. Blades, Pres., Elizabeth City, soon have plans completed and advertise for bids on 3-mi. bridge over Currituck Sound between Point Harbor and Kitty Hawk; War Dept., Washington, D. C., approved plans. 11-8

N. C., Wilmington—City Comms. considering bridge over Atlantic Coast Line R. R. tracks, North Third St.

Tenn., Knoxville—Engineers of Tennessee Dept. of Highways and Public Works, Nashville, soon make soundings for bridge at Cherokee Farm.

Tenn., Knoxville—Dept. of Highways and Public Works, Col. H. S. Berry, Commr., Nashville, plans 5-span through truss steel structure over Tennessee River at U T Farm; 841-ft. bridge, 384-ft. conc. approaches; main span for river traffic, 323 ft. long; G. W. Freeman, Associate Engr.; Clarence Baker, Asst. Engr. 11-8

Tenn., Nashville—Davidson County plans 3 bridges. See Roads, Streets, Paving.

Tex., Houston—City, Mrs. W. H. Westerman, Acting Sec., plans rein. conc. bridge over White Oak Bayou, Lowell St., cost \$20,000; J. C. McVea, City Engr.

W. Va., Charleston—Kanawha County Court will let contract in Dec. for bridge across Kanawha River at west end of city of Charleston; \$900,000 available.

Contracts Awarded

Ala., Montgomery—State Highway Comsn. let contract at \$52,225 to Ed. Pettus for timber and conc. bridges on Carterhill road, between Montgomery and Pike County line; Winter Construction Co. has contract at \$43,028 for constructing culverts on same road.

Ala., Montgomery—City Comn., W. A. Gunter, Mayor, let contract to Bosworth-Smith Co., Shepherd Bldg., for rein. conc. bridge over Genetta Ditch, Fairview Ave., Cleveland Ave. to Oak St. 11-8

Fla., Miami—H. M. Whitecomb, City Pur. Agt., let contract to John J. Quinn Co., 116 N. E. 29th St., 71 cents per cu. yd. for 8,000 cu. yd. rock and sand fill for north and south approaches to new S. E. Second Ave. Bridge.

Canning and Packing Plants

Okla., Muskogee—Chamber of Commerce interested in establishment of cannery.

S. C., Dillon—Chamber of Commerce, E. I. Reardon, Sec., interested in establishment of cannery, Dillon County farmers to raise products, outside capitalists to build, operate and manage plant.

Clayworking Plants

Ala., Robertsdale—Dixie Clay and China-ware Co., incorporated; Frank Barchard, Foley; Col. E. Higdon, Birmingham; capital \$50,000; has had clay deposits analyzed; location of plant not decided.

Coal Mines and Coke Ovens

Okla., Muskogee—Seminole Coal Co., James C. Sibbitt, Sec., P. O. Box 582, will develop 700 acres. See Want Section—Machinery and Supplies.

West Virginia—Truax-Traer Coal Co., Columbus and Minot, N. D., reported, acquired 20,000 acres of bituminous coal land in Kanawha County, covering 22 operations; company incorporated under laws Delaware, offering \$3,000,000 15-yr. 8½% convertible debentures 100,000 shares common stock through Goldman, Sachs & Co., New York, and Lane, Piper & Pafray, Inc., Minneapolis; company operates coal mines in North Dakota and Illinois; will purchase entire stock of Cabin Creek Consolidated Coal Co., Charleston and Rayford, W. Va., which operates drift coal mines in West Virginia; proceeds to be used for discharge obligations incurred and to be incurred in connection with purchase of Illinois properties and entire capital stock of Cabin Creek Consolidated Coal Co. for installation of additional equipment of these properties and retirement of preferred stock heretofore outstanding and additional working capital.

Concrete and Cement Plants

Fla., Miami—O'Neal Block Co., 1338 N. W. 29th St., incorporated; S. W. O'Neal.

S. C., Charleston—Concrete Products Co., capital \$15,000, incorporated; T. C. Stevenson, T. C. Stevenson, Jr.

Drainage, Dredging and Irrigation

Tex., Houston—Dist. Engr., reported, let contract to Lake Arthur Dredging Co., Wess Bldg., Beaumont, for deepening and widening channel between Turning Basin and foot of Main St.

Virginia—U. S. Engr. Office, Norfolk, receives bids Nov. 15 for dredging approximately 3,977,000 cu. yd. of material, scow measurement, for channel across Rockland-ing Shoal in James River.

Va., Newport News—U. S. Engr. Office, Norfolk, receives bids Dec. 15 for dredging 2,000,000 cu. yd. in channel to Newport News.

Electric Light and Power.

Electric light and power work in connection with many LAND DEVELOPMENT operations involves the expenditure of large sums of money. See that classification for details.

Ala., Mobile—Southeastern Production Co., organized by Southeastern Power and Light Co., Birmingham, under laws of Florida, constructing on Hog Bayou combination steam and electric plant to supply steam and power to International Paper Co.; first unit will cost \$1,300,000; have capacity 10,000 h. p. and 135,000 lb. steam per hr.; work being done by Dixie Construction Co., subsidiary of Southeastern Power and Light Co.

Ala., Mobile—City let contract for white way system to John O'Donnell Electric Shop, 57 Continental St., Cox Electrical Engineering and Supply Co., 68 St. Michael St., and Nick-Klip Electric Co., 562 Dauphin St.; cost \$141,815. 19-4

Fla., Daytona Beach—City let contract to Olsen Electric Co., 204 El Dorado Ave., Daytona Beach, to install 17 King ornamental white way lamp standards on Atlantic Ave. 11-8

Miss., Picayune — Mississippi Power Co., Gulfport, plans construction 44,000 watt transmission line Picayune to Poplarville, serving towns of Carriers and McNeill. 11-8

Miss., West Point—Mississippi Power Co., Gulfport, reported, plans erecting sub-station; has made survey for 110,000 volt high power line from Jasper, Ala. 11-8

Mo., Joplin — The James Leffel & Co., Springfield, O., has contract from Henry L. Doherty & Co., New York, for 5 vertical turbine units, each 7250 h.p. under 55 ft. head, for installation in Empire Dist. Electric Co.'s plant. 11-1

N. C., Greensboro—Duke Power Co., Charlotte, closed agreement with city for right of way for power line through western and northwestern section of city. 11-1

Tenn., Nashville—Tennessee Electric Power Co., Chattanooga, and its subsidiary, Nashville Railway & Light Co., Nashville, let contract to Stevens & Wood, Inc., Nashville and 120 Broadway, New York, for constructing transmission lines east and south from Nashville through Centerville to Hohenwald and from Centerville, north to McEwen; 58 miles of this extension will be steel tower construction, 14 miles to be double circuit; also for constructing substations at Nashville, Centerville, McEwen and Hohenwald; enlarge existing south substation in Nashville; contractors purchasing materials; lines and substations to be completed by Summer, 1929. 11-1

Tenn., Lawrenceburg—City votes Dec. 13 on sale of light plant to Southern Cities Power Co., Provident Life Bldg., Chattanooga, and granting of 30 yr. franchise. 11-1

Tex., Dallas—Dallas Power and Light Co. acquired 40 acres land in Trinity River bottoms for possible future development. 11-1

Tex., La Grange — People's Light and Power Co., 27 William St., New York, acquired Electric Light, Ice and Water Co.; R. L. Anderson, Dist. Mgr. 11-1

Tex., Smithville—Austin Gas Co., subsidiary of People's Light and Power Corp., 27 William St., New York, acquired Smithville Electric Light, Water and Power Co. 11-1

Tex., Weimar—People's Light and Power Co., 27 William St., New York, acquired Weimar Power and Light Co.'s plants at LaGrange and Weimar. 11-1

Va., Natural Bridge—Virginia Public Service Co., Charlottesville, applied to Federal Power Com'n., Washington, D. C., for license for transmission line, 5 miles long, from Cold Spring to Pkin; power transmitted over this line to be used by U. S. Manganese Corp. of Pkin (P. O. Vesuvius). 11-1

Va., Richmond—See Textile Mills. 11-1

Va., Richmond — RoseCliff Development Corp., Milton E. Marcuse, Pres., Jefferson Hotel, Richmond, reported, let contract to Rinehart & Dennis, Charlottesville, for dam and hydro-electric plant on James River near Snowden; development will be between Amherst and Bedford Counties, 4 miles from Big Island plant of Bedford Pulp and Paper Co.; capacity 10,000 hp.; M. M. Marcuse, Secy.; I. J. Marcuse, V-P; contract let to Westinghouse Electric and Manufacturing Co., East Pittsburgh, Pa., for electrical equipment; W. C. Whitner & Co., Inc., Electric Engrs.; the James Leffel & Co., Springfield, Ohio, has contract for turbines, 5 units, each 2600 hp., 28 ft. head. 11-1

Va., Waynesboro—See Textile Mills. 11-1

Flour, Feed and Meal Mills

La., Kaplan—Liberty Feed Mills, Inc., capital \$100,000, chartered; A. Kaplan, Crowley; S. W. Rhodes, Kaplan. 11-1

Foundry and Machine Plants

Okla., El Reno—Lanman Foundry & Machine Co., capital \$15,000, incorporated; Guy Lanman, K. E. Humphrey. 11-1

Tex., Houston — Wyatt Metal & Boiler Works, W. J. Wyatt, Pres., let contract to Houston Structural Steel Co., 3910 Washington St., for constructing plant for fabricating steel plate and metal work; struc. steel, corrugated iron, 150x360 ft., 1 story; company manufactures tanks from steel plate, including pressure and storage tanks; also builds refinery equipment, smokestacks, natural gasoline plants, etc. 11-15

W. Va., Huntington—Mott Core Drilling Co., Ninth St. and Eighth Ave., erecting 2-story warehouse and machine shop; brick, conc., steel, 54x60 ft., conc. and wood floors; Chorley Eckman, Archt., West Building; M. Z. Zinn Constr. Engr., J. St. W.; work on day basis; C. W. White has contract for

brick; Huntington Iron Works, 831 Adams Ave., contract for steel. See Want Section—Machinery and Supplies. 11-15

Gas and Oil Enterprises

La., New Roads—Rassourel Oil and Gas Co., Inc., chartered; M. P. Gooden, W. McBurnett. 11-1

La., New Orleans—Tanli Oil Co., Inc., chartered; Chas. Weinberger, 7022 Charles Ave. 11-1

La., Shreveport—D. C. R. Oil Co., Inc., chartered; D. C. Richardson, Jr., 200 Prospect St. 11-1

Miss., Greenville—Washington County Bd. of Supervisors granted franchise to Mississippi Gas and Electric Co. for distributing natural gas in county. 11-1

Mo., St. Louis — Roxana Petroleum Co., changed name to Shell Petroleum Co., Shell Bldg.; Roxana Petroleum Co., recently, reported, let contract to United Iron Works, Inc., Ridge Arcade Bldg., Kansas City, for 4000 tons steel for refinery, and to Youngstown Sheet and Tube Co., Youngstown, O., for 45,000 tons pipe for 10-in. line and to National Tube Co., Frick Bldg., Pittsburgh, Pa., for smaller tonnage. 11-8

N. C., Winston-Salem—Pilot Oil Co., capital \$100,000, incorporated; R. W. Craft, 1200 Elizabeth Ave. 11-8

Okla., Muskogee—Municipal Gas Co. soon begin work on second project of company, including lines on Spaulding Blvd., Dorchester, Twenty-fourth Sts. 11-8

Okla., Ponca City—Stockholders of Southland Royalty Co. and Marland Employees Royalty Co. vote Dec. 12 on merger of companies, with P. B. Lowrance, Pres. 11-8

Okla., Tulsa—Republic Iron & Steel Co., Youngstown Sheet & Tube Co., both Youngstown, O., reported, have contract 530 mi. 12½ in. steel gas pipe for line from Tulsa to Lockport, Ill. 11-8

Texas—Texas Empire Pipe Line Co., Tulsa, will have plans and specifications completed and ready for contractors in December for 600 mile 12-in. pipe line to carry crude oil from Mid-Continent Field to Chicago, Ill., where it will serve refinery to be built by Empire Gas and Fuel Co.; line to cost \$15,000,000 and probably be in operation in June, 1929; company was recently organized to build and operate this line by Empire Gas and Fuel Co., Bartlesville, Okla., subsidiary of Cities Service Co., 60 Wall St., New York, and by Texas Corp., 720 San Jacinto St., Houston, Texas, and 17 Battery Place, New York, each of two organizing companies to own 50% of new company's stock. 11-15

Texas—A. O. Smith Corp., 27th and Keefe Sts., Milwaukee, reported, has contract 40,000 tons 10-in. electrically welded steel pipe for 100 mile pipe line in Texas for Shell Pipe Line Co., Shell Bldg., St. Louis, Mo. 11-15

Tex., El Paso—Texyori Oil Co. incorporated; Walter M. Drury, Mills Bldg. 11-15

Tex., El Paso—City Council may grant franchise to El Paso Gas Utilities Corp. to distribute natural gas; corporation will pipe natural gas to El Paso from Lea County, New Mexico. 11-15

Tex., Ingleside—Humble Oil and Refining Co., Houston, has foundations 40% completed in connection with \$1,000,000 cracking plant now being constructed; anticipate completing plant about April, 1929. 9-27

Tex., Pampa—Texas Corp., 720 San Jacinto St., Houston, let contract to Phoenix Iron Works, for 588 tons struct. steel for two 80,000 bbl. tanks. 11-15

W. Va., Huntington—Inland Gas Corp., Ashland, Ky., and Union Central Bldg., Cincinnati, Ohio, let contract to Hope Engineering Co., Mt. Vernon, O., for constructing line to Huntington. 11-15

Ice and Cold-Storage Plants

Mo., Kirkwood — Kirkwood Refrigerators Co. incorporated; Louis Franz, George Boaz. 11-1

N. C., Winston-Salem—Trade Street Coal Co., Inc., W. W. McGee, Pres., Bruce Bldg., receive bids Mar. 1 for erecting ice plant. See Want Section—Machinery and Supplies. 11-1

Okla., Britton—Zero Ice & Cold Storage Co., 729 W. Grand St., Oklahoma City, erect \$30,000 ice plant. 11-1

S. C., Greenville—Pearce-Young-Angel Co. call for bids soon for erecting cold storage building; rein. conc., brick, 2 stories and basement, 125x75 ft., tar and gravel roof; Haskel H. Martin, Archt., Vickers Bldg. 11-8

Tex., Raymondville — George R. Lochrie plans erecting \$50,000 ice plant. 11-1

Va., Norfolk—Jones Cold Storage and Terminal Corp., Arthur P. Jones, Pres., 1215 E. Water St., erecting cold storage plant, E. Main and Water Sts.; rein. conc., 6 stories, 90x120 ft.; Neff & Thompson, Archts., Seaboard Bk. Bldg. 11-1

Iron and Steel Plants

Ala., Birmingham—Alabama Structural Co., C. Winston Cooper, Pres., Powell Ave. and 43d St., P. O. Box 601, construct steel fabricating plant, 50x100 ft.; install punches, shears, compressors; construction by company's forces. 11-15

Md., Baltimore—U. S. Steel Corp., 71 Broadway, New York, reported, considering establishment of plant; will import ore for smelting in furnaces. 11-15

Land Development

Fla., St. Petersburg — Central Holding Corp., capital \$1,000,000, incorporated; C. O. Bird, R. S. Bayard. 11-1

Fla., West Palm Beach—Datura Arcade, Inc., chartered; O. A. Gane, H. P. McGoogan. 11-1

Ga., Atlanta—Ridgewood Development Co., capital \$100,000, incorporated; A. O. Randall, Connally Bldg. 11-1

Ga., Macon—Central Realty Co., capital \$21,000, incorporated; A. R. Willingham, 410 College St. 11-1

La., Arabi—Carter, Inc., capital \$20,000, chartered; Carter Schwing, 5101 St. Claude St. 11-1

La., New Orleans—Bienville-Jefferson Realty Co., Inc., capital \$100,000, chartered; Wm. E. Taylor, 108 University Place. 11-1

La., New Orleans—Tulane Realty, Inc., capital \$75,000, incorporated; Nat W. Bond, 406 Marine Bank Bldg. 11-1

La., New Orleans—Chippo Realty Co., Inc., capital \$15,000, chartered; A. R. Yochim, 1601 Broadway. 11-1

La., Union—Union Sugars, Inc., capital \$75,000, chartered; Jourdan Falgoust, Vacherie. 11-1

Md., Baltimore—J. G. Johnson & Co., Inc., 1723 McHenry St., incorporated; J. George Johnson, Harry W. Shenton. 11-1

Md., Baltimore—Kent Island Development Co., First Natl. Bank Bldg., incorporated; Theodore Cooke, Jr., Theodore C. Waters. 11-1

Md., Cumberland — Greenmount Cemetery Bd. of Directors acquired 3 acres for addition to cemetery. 11-1

Md., Dundalk—Dundalk Development Co., incorporated; George Norwood, W. E. Henderson. 11-1

Md., Easton—Winodee Corp., incorporated; T. Hughlett Henry, John W. D. Jump. 11-1

Md., Salisbury—Community Land Development Co., incorporated; John W. West, Arthur Holloway. 11-1

Mo., St. Louis—Raymuth Building & Real Estate Co., capital \$75,000, incorporated; George W. Hellmuth, 4468 Maryland Ave., St. Louis. 11-1

Mo., St. Louis—Renid Real Estate & Investment Co. incorporated; George E. Fifield, 6179 McPherson St. 11-1

Mo., St. Louis—Clyde Realty Co. incorporated; Clyde H. Sims, 314 N. Channing St. 11-1

N. C., Biltmore—Nettlewood Nurseries, Inc., capital \$100,000, incorporated; H. L. Nettles, Alfred Griset. 11-1

N. C., Charlotte—Moore and Williams, Inc., capital \$50,000, chartered; C. C. Moore, Statesville Rd. 11-1

N. C., Concord—City expending \$60,000 for completion of sewer system and provide for disposal plant, will expend \$15,000 for laying conc. driveways and other improvements to Oakwood Cemetery. 11-1

Tex., Austin—J. F. Johnson, 3rd and Red River Sts., has contract at \$22,536 for changing channel and sloping banks of Bartons Creek from Bartons Spring Rd. to bathing pool; C. A. Maufrais, 819 W. 12th St., contract at \$3590 for wading pool, sidewalks and retaining walls above bathing pool in connection with park improvements. 11-8

Tex., Houston—Houston Farms Development Co., T. P. Lee, Pres., Second Natl. Bk. Bldg., acquired tracts in Brazoria County totaling 6247 acres. 11-1

Tex., Houston—City will probably develop Glenbrook Country Club for park and golf course. 11-1

Tex., Houston—C. J. Frankel, Electric Bldg., has option on 505 acres west side of Kemah-Texas City Highway. 11-1

Tex., San Antonio—San Antonio Suburban Irrigated Farms, Frost Bldg., offering \$750,000 first mortgage and collateral trust 6% gold bonds through J. E. Jarratt Co., Republic Bank Bldg., Dallas; company has under development 40,000 acres Medina Valley irrigation project. 9-13

Va., Clarendon—Arlington County Bd. of Supervisors plans enlarging Columbia Gardens Cemetery. 11-1

Va., Staunton—National Real Estate Corp., capital \$50,000, incorporated; M. H. Lambert 11-1

Lumber Enterprises

La., Morrow—Ramsey Lumber Co. plans establishing sawmill.

N. C., Lenoir—E. B. Crisp, W. H. Livingston and Lloyd Suddreth acquired 350 acres and 2,500,000 ft. of timber from Elk Creek Lumber Co. along Lenoir-Blowing Rock highway; 1 mill operating, others will be established.

Tex., Houston—Robertson-Kurth Hardwood Lumber Co., capital \$30,000, incorporated; C. J. Robertson, Jr., 115 Hathaway Ave.

Tex., Marshall—Marshall Lumber Co., acquired 16,000 acres of timberlands, along Harrison-Panola Counties line and in Harrison County; cut lumber and use for railroad ties and other purposes.

Mining

Ala., Talladega—Watt T. Brown, 1905 14th Ave., S., Birmingham, acquired Talladega furnace and 5,000 acres of coal and iron ore lands in Talladega and St. Clair Counties.

Ark., Little Rock—Dixie Bauxite Co., capital \$40,000, incorporated; P. A. Dulin, 2222 Vance St.

Ark., Pine Bluff—Arkansas Sand and Material Co., incorporated; Marvin Jones, C. F. Krimm; leased large tract on Arkansas River; erect buildings, spur tracks, wharves, roadways, warehouses; will take sand from river.

Mo., St. Louis—National Iron Ore Corp., capital \$250,000, incorporated, with Lloyd P. Radford, Pres., 306 Rialto Bldg.; will operate mine at Keener.

Miscellaneous Construction

Fla., Fort Pierce—Carl H. Fay has contract for 200x400-ft. slip and pier for Fort Pierce Financing & Construction Co.

Fla., Gulfport—Town votes Dec. 8 on bonds for water front improvements; include filling and building of parkways and yacht basin or boat harbor. See Financial News.

Fla., Jacksonville—City Comm. receives bids Dec. 17 for improving McCoy's Creek. See Want Section—Bids Asked.

Fla., Tampa—Port Development Bureau of Chamber of Commerce interested in \$1,500,000 floating dry dock to handle large vessels and to be equipped with machinery to handle all kinds of hull and superstructure repairs; Tampa Shipbuilding and Engineering Co. has prepared blue prints.

Louisiana—War Dept. U. S. Engr., New Orleans River Dist., Office of Dist. Engr., River Front and Burdette Sts., New Orleans.—Bids Nov. 30 for constructing 172,000 cu. yd. of earth work. See Want Section—Bids Asked.

Md., Cumberland—City receives bids Nov. 26 for lowering canal dam and installing flash boards. See Want Section—Bids Asked.

North Carolina—Conservation and Development Dept., Wade H. Phillips, Director, Raleigh, approved plans for erecting 32 steel lookout towers within next 2 years; will erect 125 ultimately.

Tex., Corpus Christi—City has low bid from Daugherty, Nichols & Young Construction Co., at \$22,000, for constructing tunnel for accommodation of pedestrians from Schatzel St. to Leopard St.; 400 ft. long, 8 ft. wide, 8½ ft. high. 11-18

Tex., Fort Worth—Chicago, Rock Island and Pacific Railway Co., R. H. Ford, Asst. Ch. Engr., Chicago, Ill., approved plans for \$200,000 subway to be constructed at East Fourth St. by company and city of Fort Worth; may receive bids about Jan. 1.

Tex., San Angelo—City receives bids for construction of \$25,000 incinerator, Dec. 18.

Va., Norfolk—U. S. Engr. Office, Lieut.-Col. Henry C. Jewett, Dist. Engr., has low bid from W. L. Jones Construction Co., Inc., Elizabeth City, N. C., at \$15,698 for timber wharf and granolithic walk at Jamestown Island.

Miscellaneous Enterprises

Ala., Birmingham—Cudaby Packing Co., 2307 First Ave., will erect building, Ninth and 25th Sts., 100x200 ft., 1 story; building will be equipped with refrigeration for storage of fresh meats and apparatus for smoking and baking hams.

Ark., Little Rock—Mrs. P. W. Crawford, 923 Scott St., plans erecting building, near Markham and Ferry Sts., to be leased by Loose-Wiles Biscuit Co.; brick, 1 story, 50x150 ft., comp. roof, conc. floors, conc. foundation.

Fla., Fort Pierce—Sandford Shrimp and Packing Co. organized, to be headed by William P. Sandford; let contract to Cahow Construction Co. for packing house, 40x80 ft.

Fla., Jacksonville—Curtin-Howe Corp., 11 Park Place, New York, has contract to install preservative mixing plant, using ZMA process at plant of Eppinger & Russell Co., Talleyrand Ave.

Fla., Miami—Contractor—Weber-Squires Corp., incorporated; Albert Weber, Meyer-Kiser Bldg.

Ga., Atlanta—Massell Realty Co., 61 Poplar St., erect laundry, 135x210 ft.; boiler house, 45x40 ft.; work shop, 70x100 ft.; garage, 70x100 ft.; mill construction, 1 story, cement floors, gravel roof; buildings and equipment to cost \$145,000; E. C. Seiz, Archt.; address equipment proposals to Atlanta Linen Supply Co., Lessee; owners build. See Want Section—Machinery and Supplies, and Building Material and Equipment.

Ga., Hawkinsville—Ridley-Haskins Hardware Co., capital \$50,000, incorporated; P. K. Ridley, H. A. Haskins.

Ga., Washington—John E. Stoddard, Lincoln, Neb., acquired News Reporter, weekly newspaper.

Ky., Louisville—Patented Specialties Co., capital \$100,000, incorporated; J. D. McDonough, G. R. McDonough; will manufacture metal, rubber, etc.

Ky., Louisville—United States Shoe Co., 1122 Rowan St., will erect \$117,000 factory building, 1700 W. Yee St.; 58x500 ft., 2 story, brick and conc.

La., West Monroe (Branch of Monroe)—City plans voting Dec. 18 on \$15,000 bonds for fire fighting equipment. See Financial News.

La., New Orleans—Associated Hat Factories, Inc., capital \$20,000, chartered; Harold S. Weil, 18 Audubon Pl.

Md., Baltimore—Maryland Plumbing Supply Corp., Baltimore and Eden Sts., incorporated; Edwin A. Oberhelm.

Md., Baltimore—Western Electric Co., 195 Broadway, New York, Edgar S. Bloom, Pres., let contract to H. K. Ferguson Co., Hanna Bldg., Cleveland, O., for design and construction of \$15,000,000 telephone cable and wire manufacturing plant; also engineering work and clearing site, constructing bulkheads, dredging and filling, erection of buildings, including power house and installation of all equipment. 11-18

Md., Baltimore—Chase & Waring, William Gerstmyer, Mgr., 425 St. Paul St., erecting building, Falls Rd. and Lake Ave., for research work and gases, principally oxygen; H. W. Hitchcock, Contr., 1720 E. Lafayette Ave.

Md., Baltimore—Western Electric Co., 195 Broadway, New York, Edgar S. Bloom, Pres., reported, let contract to H. K. Ferguson Co., Hanna Bldg., Cleveland, Ohio, for designing and constructing \$15,000,000 telephone cable and wire manufacturing plant. 11-18

Md., Baltimore—Maryland Ship Ceiling Co., 1934 E. 30th St., incorporated; Oscar A. Shillingburg, Ralph L. Shillingburg.

Md., Cumberland—Independent Glass Co., capital \$10,000, incorporated; William L. Lutz, Mary E. Ward; will manufacture bottles, etc.

Mississippi—Kraft-Phenix Cheese Co., 400 Rush St., Chicago, Ill., offering \$6,000,000 6½% cumulative preferred stock through Alex. Brown & Sons, and Brown Bros. & Co. A. Berman, Sec. Power Bldg., Cincinnati.

Miss., Laurel—Masonite Corp., erecting \$40,000 addition to insulating and building-board plant; 76x100 ft., 100x100 ft. and 50x50 ft., steel, galvanized corrugated iron and conc. galv. iron roof; work to be done by company's forces; equipment includes 2,000 ton steam heated hydraulic presses; 1600 h. p. in 200 lb. pressure boilers, 400 h. p. in 1200 lb. pressure boilers from Babcock & Wilcox Co., 85 Liberty St., New York; Southwark Foundry and Machine Co., 1150 S. Fourth St., Philadelphia, and Westinghouse Electric and Mfg. Co., East Pittsburgh, Pa., to furnish equipment. 11-15

Miss., Natchez—Hightower Planting and Canning Co., capital \$150,000, incorporated; Geo. Hightower, Frank J. Duffy.

Mo., Eldon—Central Cheese Co. will enlarge factory.

Mo., Kansas City—Mid-Continent Lacquer Mfg. Co., 318 Southwest Blvd., acquired 3-story building, Goodrich Place and Central St.; will establish plant to manufacture paints, varnishes and lacquers.

Mo., Kansas City—Schermer Fuel Service Co., 220 W. 72nd St., incorporated; Fred W. Schermer.

Mo., Marshallfield—John Gunerfelder and Edward Knecht acquired Tri-State Cheese Co.

Mo., Monroe City—Chamber of Commerce interested in establishing cheese factory.

Mo., St. Louis—Cleaning Compounds, etc.—Wellworth Co., incorporated; C. P. Dimmitt, St. Louis; Robert Jones, University City, Mo.

Mo., St. Louis—St. Louis Sulphur and Chemical Co., A. J. Heyer, Pres., 300 E. Primm St., increased capital, \$50,000 to \$100,000.

Mo., St. Louis—Household Coal Stoker Co., incorporated; E. J. Wallace, 4243 Lafayette St.

Mo., St. Louis—American Packing Co., George E. Niedt, Pres., 3842 Garfield St., increased capital, \$500,000 to \$1,000,000.

Mo., St. Louis—Surface Vault Co. of America, incorporated; Hunter Woodson, 5643 Julian St.

Mo., St. Louis—St. Bernard Coal Co. incorporated; Jacob B. Youch, 3229 Copell Ave.

Mo., St. Louis—Diagraph Stencil Machine Corp. incorporated; James W. Brigham, Webster Groves; Hilda A. Schleicher, St. Louis.

Mo., St. Louis—Emery Carpenter Container Co., June and Long Sts., Cincinnati, Ohio, and 705 Olive St., St. Louis, leased portion of building, 2731 Papin St.; install \$50,000 machinery and equipment; manufacture cylindrical fibre shipping drums.

Mo., St. Louis—Envelope Manufacturing Co., Charles F. Pfauze, Pres., 214 Chestnut St., erecting 1-story factory building, Second St. and Clark Ave.; 150x125 ft., 20,000 sq. ft. floor space; cost \$75,000.

Mo., St. Louis—Independent Metal Ware Co., 1511 N. Broadway, increased capital to \$30,000.

N. C., Asheville—Anderson Tractor and Equipment Co., Inc., capital \$100,000, chartered; A. E. Finley, H. A. Honeyham.

N. C., Charlotte—C. W. Christian, 937 Providence Road, has contract for heating system for plant now under construction for News Publishing Co., Lockwood Greene Engineers, Inc., Engrs.

N. C., Winston—Johnson-Earl-Meyers, Inc., 620 Second Ave., Pittsburgh, Pa., acquired Magnolia Products Co.; will manufacture pickles on large scale.

N. C., Lincolnton—Robinson Radio and Electric Co., capital \$25,000, incorporated; E. S. Terrell, Lincolnton; O. B. Robinson, Gastonia.

N. C., Wilmington—Herbst Boat Works, Inc., chartered; Julius T. Herbst, John L. Hammer, 1801 Grace St.

Okla., Ardmore—New State Hardware Co., capital \$25,000, incorporated; W. W. Clemens, Clarence Atkins.

Okla., Muskogee—Herald Publishing Co., capital \$20,000, incorporated; A. H. Fuhr, 906 Market St.

Okla., Muskogee—Ozarka Beverage Co., Inc., capital \$50,000, chartered; Roy Bingham, Muskogee; A. Clark, Picher.

Okla., Ponca City—Elks Building Corp., capital \$100,000, incorporated; C. G. Dent, J. L. Davis.

S. C., Spartanburg—Frigidaire Corp., R. F. Callaway, Mgr. of Branches, Dayton, Ohio, leased 3-story building, Broad St.; establish distributing headquarters.

S. C., St. George—Printing—Record Co., incorporated; George R. Koester, Will F. Patric.

Tenn., Columbia—Ironall Factories Co., Power Bldg., Cincinnati, Ohio, acquired property, Depot St.; will remodel and erect addition for establishing plant.

Tenn., Johnson City—Crawford & Slaton Co., Wilder Bldg., Charlotte, N. C., has contract for installing automatic sprinkler system in plant now under construction for Appalachian Publishers, Inc.; Lockwood Greene Engineers, Inc., Engrs., Charlotte, N. C.

Tenn., Knoxville—Eugene Fretz will erect \$75,000 building, Broadway and Jackson Ave., for Goodyear Rubber Co., 407 State St.; 191x64 ft., steel, brick and concrete; Ryno & Brackney, Archts., Brownlow Bldg.

Tex., Bonham—H. A. McDougal, Tyler, acquired Bonham Daily Favorite and Fannin County News.

Tex., Dallas—Times Herald Publishing Co. erect \$184,000 plant and office building, Pacific Ave., Murphy and Patterson Sts.; conc., 4 stories.

Tex., Houston—Southern Water Heater Co., Los Angeles, Calif., plans establishing \$75,000 factory to manufacture storage water heaters.

Tex., Houston—Frank Ingrand, 1218 E. Alabama St., erect \$10,000 laundry and store building, 2818 Caroline St.; rein. conc., brick, stucco, 50x89 ft.; 2 stories, tile roof; J. Robert Cox, Archt., Scanlan Bldg.; construction by day labor.

Tex., Houston—Fleischmann Co., 311 Cheney St., let contract to Thomas T. Hopper Co., Post-Dispatch Bldg., for erecting building and garage; hollow tile, stucco, cost \$80,000; Louis L. Tieman, Archt., New York.

Tex., Houston—Prest-O-Lite Co., Inc., 6119 Harrisburg Rd., let contract to Don Hall, Cotton Exchange Bldg., for erecting 2 buildings, Hughes St.; steel frame, corrugated iron; cost \$35,000.

Tex., Houston—Texas Bread Co., 1118 Taylor St., plans erecting \$28,000 plant, 1118 Taylor St.; rein. conc. and brick.

Tex., Mesquite—Chamber of Commerce interested in establishing creamery.

Tex., Waco—William Smith, 1320 Franklin Ave., has contract for erecting brick building, 12th and Washington Sts., for Howard Dry Cleaning Co.; T. Brooks Pearson, Archt., 1824 Mitchell Ave.

Va., Boydton—E. Y. Noblin and others will erect cheese factory.

W. Va., Clarksburg—E. I. du Pont de Nemours & Co., Wilmington, Del., will issue 149,392 shares of no par common stock in connection with the acquisition of the Grasselli Chemical Co. 11-15

Va., Norfolk—Moon Shipyard & Repair Corp., capital \$100,000, incorporated; Guy H. Moon, 533 Front St.

W. Va., Charleston—Paints, etc.—Hoke-Martin Co., capital \$10,000, incorporated; C. E. Carey, H. H. Hoke, 31 Rhodes Ave.

W. Va., Huntington—Sterling Co., Harry A. Frenzel, Mgr., 21st St., subsidiary of the Alliance Mfg. Co., Chicago, plans expanding clothing plant.

W. Va., Moundsville—Moundsville Journal Co. incorporated; C. Boyd Hilton, H. C. Ogden, both Wheeling.

W. Va., Wheeling—A. and P. Cleaners and Dyers, capital \$10,000, incorporated; Ben Resnick, Birch Ave., Birch Lynn.

Motor Bus Lines and Terminals

Alabama—Union Transfer Co., Murfreesboro, Tenn., acquired bus line operating from Pulaski to Decatur.

Ark., Walnut Ridge—J. J. Sharum will operate bus line to Paragould.

Md., Cumberland—Interstate Bus Line, capital \$20,000, incorporated; Samuel W. Reed, Harry E. Wolford.

Tex., Beeville—Southwell Motor Co. incorporated; George T. Southwell, Jr., Jack B. Crain.

W. Va., Charleston—Virginia Transportation Co., Inc., authorized to hold property in W. Va., plans to operate a motor bus between Pocahontas, Va., and Rock, W. Va.

Motor Cars, Garages, Filling Stations

Ala., Birmingham—McIntyre Bros. erect \$10,000 garage addition to be occupied by Hobbie-Flowers Motor Car Co.; brick, 1 story; owner builds.

Ala., Birmingham—C. C. Kerner, 1100 S. 28th St., erect \$40,000 garage, S. 22d St.; brick and steel, 3 stories, 100x140 ft., conc. slab roof.

Ala., Georgiana—Georgiana Whippet Co. erecting addition to building.

Ark., Fort Smith—F. L. Coulter, 3219 N. 11th St., plans erecting filling station and residence.

Ark., Little Rock—Reo Little Rock Co., capital \$25,000, incorporated; Van G. Savage, 2404 Gaines St.

D. C., Washington—Service Motors, Inc., capital \$30,000, incorporated; Oliver F. Busby, Bond Bldg., Washington; John C. Wiegand, Silver Spring, Md.

D. C., Washington—Washington Filling Stations, Inc., erect \$10,000 gasoline station, 1400 Maryland Ave.; brick, 1 story.

Fla., Jacksonville—Johnson Finance and Construction Co. erecting for city, 2 1-story, brick buildings, 523 W. Third St., for garage and machine shop; cost \$51,750.

Fla., Jacksonville—Kirby-Noland Co., 510 W. Forsyth St., let contract to Walter Bryson Paving Co., W. 14th St., for erecting building, Second and Main Sts.; Charles B. Schoeppl, Archt., Consolidated Bldg.

Fla., Pensacola—Eighty-One Tire Service, Inc., capital \$15,000, chartered; Tom Stone, J. W. Lord.

Fla., West Palm Beach—H. R. Brust, 804 S. Poinsettia St., announced plans for enlarging Asher Service Station, Lakeview Ave. and Dixie Highway, to be occupied by East Coast Tire Co.; install hydraulic lift and other modern equipment.

Ga., Augusta—Bon Air-Vanderbilt Hotel, Walton Way, W. F. Rogers, Ch. Engr., erecting 60x90 ft. brick garage addition, Heard Ave. and Heckle St.; W. F. Rogers, Archt.

Ga., Savannah—American Oil Co., 811 Wheaton St., acquired site, Henry and W. Broad St., will erect filling station.

Ky., Glasgow—Richardson Chevrolet Co., capital \$20,000, incorporated; Frank Richardson, Louise Richardson.

Ky., Louisville—C. T. Dearing Printing Co. acquired site adjoining present plant, 11th St. and Broadway; plans expansion.

La., New Orleans—John Van Vrancken, 1930 Robert St., will erect oil station, 3400 Magazine St.; 1 story, brick, comp. roof.

La., Ponchatoula—Liberty Products Co., Inc., capital \$25,000, chartered; H. J. Lavigne, H. J. Leonard.

Md., Baltimore—Ashley Chevrolet Sales Co., Donald L. Ashley, Pres. and Gen. Mgr., Center and St. Paul St., erect building, Falls-way and Bath St.; 20,000 sq. ft. floor space.

Miss., Vicksburg—Vicksburg Motor Co., capital \$50,000, incorporated; J. H. Cuklin, Merchants Natl. Bk. Bldg.

Mo., Clayton, St. Louis—Clayton Motor Co., capital \$25,000, incorporated; Louis J. Berkley, 131 Washington St.; Lyman E. Irwin, 625 E. Jefferson St., both Kirkwood.

Mo., Jefferson City—Capital City Oil Co., John Guy Gibson, Mgr., erect \$20,000 filling station, McCarty and Jefferson Sts.; 2 stories and basement, tile roof, stucco; Kennerly & Stiegemeier, 1111 Title Guarantee Bldg., Archts. 10-4

Mo., Kansas City—Fred Wolfson, 804 Commerce Bldg., rebuilds garage, 3770-84 Broadway; 155x135 ft., 1 story, conc. floors, shingle roof; to be leased by Powell Auto Service, Inc.

Mo., Kansas City—Charles E. Phillips, Victor Bldg., erecting fireproof garage, 4739 Bellevue Ave., 90x130 ft., to accommodate 250 motor cars.

Mo., Springfield—Harry and Jewell Powell rebuild burned garage, Newton and High Sts.

Mo., St. Louis—St. Louis Body Equipment, I. O. Boardman, Pres., plans erecting \$30,000 building, Sarah St. and Forest Park Blvd.; 1-story, 14,000 sq. ft. floor space.

Mo., St. Louis—Branscome Hotel Co., 537 Pershing Ave., erect 275x100-ft. underground garage.

Mo., St. Louis—Berry Motor Car Co., 2201-9 Locust St., remodel 4-story building; cost \$10,000.

Mo., St. Louis—Jennings Auburn Garage Co., care Roscoe B. Johnson, 208 N. Broadway, receiving bids for \$25,000 garage and salesroom, Florissant and Hodiamont Aves.; 1 story and basement, 137x42x87 ft., conc. foundation, steam heat; Fred H. Peipers, Archt., 395 Arcade Bldg.

N. C., Rutherfordton—Phoenix Chevrolet Co., capital \$25,000, incorporated; J. R. Jones, Jr., Albemarle; L. T. Harris, Rutherfordton.

N. C., Rutherfordton—Phoenix Chevrolet Co., capital \$25,000, incorporated; J. R. Jones, Jr., Albemarle; M. G. McIver, Rutherfordton.

Okla., Clinton—Shepherd Motor Co., capital \$15,000, incorporated; L. P. Shepherd, Shawnee; W. A. Barrett, Clinton.

Okla., Enid—Square Deal Tire Co., capital \$100,000, incorporated; W. E. Worden, Enid; E. L. Kibble, Wichita, Kan.

Okla., Oklahoma City—Magnolia Petroleum Co., Petroleum Bldg., erect \$15,000 filling station, 1101 Classen Blvd.; brick.

Okla., Oklahoma City—Oklahoma Transportation Co., Herskowitz Bldg., erect \$20,000 garage, 400 W. Noble St.; brick.

Okla., Tonkawa—Kester & Lewis Motor Co., capital \$10,000, incorporated; E. A. Dester, Deer Creek; J. B. Sutherland, Tonkawa.

Okla., Tulsa—American Automobile Service, Incorporated; E. N. Coates, Tulsa; Albert Rankin, Sapulpa.

Okla., Wewoka—Sherritt-Parker Motor Co., capital \$50,000, incorporated; W. F. Parker, G. B. Sherritt.

Tenn., Knoxville—J. S. Cameron, Central and Cumberland Aves., and C. L. Nelms, McCalla and Franz Sts., erect \$30,000 automobile storage and store building, McCalla and Franz Sts.; 85x110 ft., 3 stories, built-up roof; Lyman A. Hayes, Gen. Contr., 314 Deadrick Bldg.; J. S. Cameron, Archt. 11-15

Tenn., Nashville—Gray & Dudley Mfg. Co., 222 N. Third Ave., remodeling garage; cost \$50,000; to be leased to Ogilvie & Son, American Trust Bldg.

Tex., Dallas—H. A. Olmstead, 2200 Live Oak St., erect \$24,000, 2-story, brick building.

Tex., Houston—C. R. Berry, Keystone Bldg., has contract to build addition to garage building, Polk and Caroline Sts., for J. L. Jones, Cotton Exchange Bldg.; 1-story, 55x85 ft., hollow tile, brick; J. W. Northrop, Jr., Archt., Kirby Bldg.

Tex., Lubbock—Lubbock Motor Co., capital \$15,000, incorporated; C. E. Gough, D. E. Bigbee.

Tex., San Antonio—Smith Brothers Properties, Inc., 117 Villita St., will erect \$350,000 garage; rein. conc. with capacity for storing 325 cars; Atlee B. and Robert M. Ayres, Archts., Bedell Bldg.

Tex., Sarita—Kenedy Pasture Co. has low bid from George Tillman, San Antonio, for erecting garages; each 1 story, brick, rein. conc.; Hardy & Curran, Archts., Nixon Bldg., Corpus Christi.

W. Va., Clarksburg—Washington Garage, Inc., capital \$50,000, incorporated; F. G. Bish, Appaline Way.

W. Va., Clarksburg—D. M. Bailey Motor Co., capital \$25,000, incorporated; Douglass M. Bailey, 426 N. Fifth St.

Railways

Ga., Augusta—Charleston & Western Carolina Ry. Co., A. W. Anderson, V. Pres. and Gen. Mgr., applied to Interstate Commerce Comm. for authority to have authenticated and delivered to treasury \$1,919,662 first consolidated mortgage 5% bonds.

La., New Orleans—Louisville & Nashville R. R. Co., W. H. Courtenay, Ch. Engr., Louisville, Ky., appropriated \$10,500,000 for new equipment and improvements to line; will erect station at Bay St. Louis to replace building recently burned. W. Horace Williams Co., 833 Howard Ave., New Orleans, has contract for railroad shops, including machine shop, car shop, roundhouse, etc.

Mo., Birmingham—St. Paul & Kansas City Short Line Ry. & Chicago, Rock Island & Pacific Ry. applied to Interstate Commerce Comm., Washington, for permission to extend lines from Allerton, Iowa, to Birmingham, Mo., to be financed by issuance of 4½% gold bonds.

Mo., Cape Girardeau—Interstate Commerce Comm. authorized Missouri Pacific R. R. Co., L. W. Baldwin, Pres., St. Louis, to issue \$30,000,000 first and refunding mortgage 5% gold bonds, Series G; proceeds of \$25,000,000 of new issue will be used in payment of short term notes for working capital and for capital expenditures; remaining \$5,000,000 will be used as collateral securities for short term notes.

Mo., St. Louis—Interstate Commerce Comm., Washington, authorized St. Louis-San Francisco Ry., J. M. Kern, Pres., to issue \$8,000,000 of consolidated mortgage 4½% gold bonds.

N. C., Asheville—Fairbanks, Morse & Co., 900 S. Wabash Ave., Chicago, has contract for constructing coaling station for Southern Railway; 1,000-ton capacity, rein. conc., automatic conveyor type with sanding facilities.

Tex., George West—Missouri Pacific R. R. Co., A. E. Hadley, Ch. Engr., St. Louis, Mo., construct 3875 ft. of 75 car capacity passing track; cost \$15,700; will let contract for grading work only; remainder of track to be constructed by company's forces. 10-11

Tex., Houston—Port Commrs. let contract to Charles K. Horton, 2202 Clay St., for extension of Public Belt Railroad to serve Roxana Petroleum Co.; work consists of main line extension and 3000 ft. passing track.

Tex., Lockney—Interstate Commerce Comm. authorized Fort Worth and Denver City Ry. Co., Hale Holden, Pres., Chicago, Ill., to construct spur track from main line in Lockney, distance of 1.37 mi., to serve mill of Lockney Cotton and Oil Co.; cost \$35,000. 11-8

Railway Shops and Terminals

Tex., Smithville—Missouri-Kansas-Texas R. R. Co., C. Haile, Pres., St. Louis, Mo., let contract to T. H. Johnson, 107½ S. Ohio St., Sedalia, Mo., for constructing 8-stall roundhouse and machine shop; cost about \$300,000.

W. Va., Benwood (Br. of Wheeling)—Pennsylvania R. R., W. W. Atterbury, Pres., Philadelphia, Pa., let contract to Croseau Construction Co., Brownsville, Pa., for engine house, office and locker building and turntable pit; cost \$95,000.

Roads, Streets and Paving

In connection with LAND DEVELOPMENT large sums are expended for roads, streets, paving and sidewalks. Details will be found under that classification.

Proposed Construction

Ala., Mobile—State Highway Comm., Montgomery, receives bids Dec. 13 for 2 roads and bridges in Mobile County: 5.13 mi. grading, draining from Chickasaw to A. T. & N. R. R.

overhead, 133,383 cu. yd. excavation; 52,880 lb. struct. steel, 211,400 lb. rein. steel in bridges; 14.90 mi. grading, draining from point near Axis to Calvert, 83,160 cu. yd. excavation, 158,400 yd. cement conc., rock and sheet asphalt or bit. conc. paving; 89,100 lb. rein. steel, 6600 lin. ft. untreated timber piles; Woolsey Finnell, Highway Director.

Ark., Booneville—City, D. B. Castleberg, Mayor, considering grading, draining, curbing, gutter and paving about 20 blocks on Main and Broadway St.; estimated cost \$100,000.

Fla., Jacksonville—City Council considering temporarily hard surfacing 4 streets, including Ralford, Forest; M. W. Bishop, City Sec.

Fla., Orlando—State Highway Comsn., Fons A. Hathaway, Chmn., Tallahassee, plans widening Dixie Highway south of Orlando to Bearhead road; also complete State Road No. 2, Orlando to Plymouth.

Fla., Orlando—Orange County Comms., B. M. Robinson, Clk., receive bids Nov. 26 for 3 projects, totaling 8.4 mi.: Earthwork, draining, rock base and surface, etc.; Chas. A. Browne, Ch. Engr.

Fla., South Jacksonville, Jacksonville—City Council may widen St. Johns Ave.

Kentucky—State Highway Comn., Frankfort, receives bids Dec. 19 for 8 roads and 2 bridges: Boyle County—4.5 mi. grade, drain Danville-Springfield road, Perryville to Washington County line; Calloway County—9.9 mi. Murray-Benton road, Murray to Marshall County line; Grayson County—9 mi. Caneyville-Beaver Dam road, Caneyville to Ohio County line; 11.8 mi. surface, Leitchfield-Caneyville, from Leitchfield to Canayville; 6.1 mi. grade, drain Clarkson-Peonia road, Clarkson to Peonia; Marion County—6.7 mi. surface, Loretto-Bardstown, Loretto to Nelson County line; Marshall County—8.4 mi. grade, drain Benton-Murray road, Benton to Calloway County line; Ohio County—10.2 mi. grade, drain Beaver Dam-Caneyville road, Norton to Ohio County line; Gallatin County—superstructure for bridge over Sugar Creek, Warsaw-Florence road, two 110-ft. steel spans, rein. conc. floor; Warren County—superstructure for bridge over Gaspar River, Bowling Green-Morgantown road, two 110-ft. steel spans, rein. conc. floor; J. S. Watkins, State Highway Engr.

Ky., Louisville—Jefferson County, Meritt Drane, Engr., plans widening and improving Brownsboro Rd., Louisville city limits to Zachary Taylor Shrine.

Ky., Marion—Crittenden County plans \$200,000 road building. See Financial News.

Louisiana—Louisiana Highway Comn., Baton Rouge, plans receiving bids for 17 roads: Sabine Parish—7 mi. Pleasant Hill-Converse Highway; 4 mi. Sodus-Ajax; Natchitoches Parish—7.8 mi. Camp-J. Goldonna; Bienville Parish—11 mi. Arcadia-Hodge; Red River Parish—11.5 mi. Coushatta-Ashland; Vernon Parish—5.1 mi. Leesville-Texas Highway; Union Parish—4.2 mi. Bernice-Homer; Livingston Parish—12 mi. Albany-Montpelier; St. Helena Parish—2 mi. Albany-Montpelier; East Feliciana Parish—5.2 mi. Port Hudson-Thompson; Livingston Parish—6.5 mi. Acy-Head of Island Highway; St. Landry Parish—7 mi. Livonia-Opelousas Highway; Claiborne Parish—Section of Haynesville-Summerfield; Lincoln Parish—Downsville-Choudrant; Richland Parish—Rayville-Oak Ridge; Rayville-Alto Highway; St. Martin Parish—Breaux Bridge-Cecilia Highway; J. M. Fourmy, State Highway Engr.

La., Alexandria—Mayor and City Council call bids Dec. 3 for paving Eighth St., Washington to Murray St. Address City Engr.

La., Covington—City, Wallace M. Poole, Mayor, receives bids Dec. 11 for 8,510 sq. yd. 2-in. asphaltic conc. base, 2-in. Warrenite bitulithic topping on Rutland St. and Jahneke Ave.; A. G. Mundinger, Engr., 200 Main St., Baton Rouge.

La., St. Joseph—Tensas Parish Police Jury, F. H. Curry, Pres., plans 30 mi. highway; approximate cost \$200,000.

La., West Monroe, Branch Monroe—City plans expending \$30,000 for street paving and improvement. See Financial News.

La., Winnfield—Winn Parish, Ward No. 1, plans macadamized road from Winnfield to Limestone rock quarry, west of Winnfield.

Miss., Clarksdale—City, R. E. Stratton, Jr., Clk., plans graveling 5 streets in Oakhurst Section, including Cheyenne St.; Walter S. Bobo, City Engr.

Miss., Greenwood—Leflore County Bd. of Supvrs. receives bids Dec. 4 for 2,982 mi. State trunk road between Minter City and Greenwood, 31,386 cu. yd. excavation.

Miss., Gulfport—City Comms. plan surfacing paved alleys with black top or asphaltic material.

Miss., Hattiesburg—City, B. D. Moore, Mayor, receives bids Dec. 6 to pave 5 streets, including Mobile, College; to lay water mains and sanitary sewers.

Miss., Holly Springs—Marshall County Bd. of Supvrs., J. T. Wade, Clk., receives bids Dec. 3 to grade 7 mi. Victoria road, in Barton and Bayhalla Road Dist., 56,000 cu. yd. excavation, 30,000 ft. creosoted lumber.

Miss., Natchez—City, S. B. Laub, Mayor, considering sidewalks on paved streets.

Miss., Vicksburg—Warren County Highway Comms., 606 First Natl. Bank Bldg., receive bids Dec. 3 for two roads: Proj. 26-8, 3.8 mi. gravel road from point near Oak Ridge to point near Russellville in Fifth Dist.; Proj. 26-4, 3.9 mi. dirt road from point at end of Youngton Extension to point known as Morley Fork in Fifth Dist.

Miss., Winona—Montgomery County Bd. of Supvrs. plans expending \$150,000 to gravel interior or lateral roads. See Financial News.

Miss., Yazoo City—City plans permanent paving on all streets.

Mo., Carthage—City Council considering paving Macon St. and Centennial Ave., Grand to Garrison Ave.

Mo., Joplin—City, O. P. Mahoney, Commr. of Streets, received low bid from Granite Bituminous Paving Co., Railway Exchange Bldg., St. Louis, \$44,400, to pave Thirteenth St. Blvd., Main St. to Maiden Lane, with Warrenite bitulithic.

Mo., Richmond—City Council considering paving with 20-ft. conc. North Main St.

Mo., Springfield—City, J. P. Ramsey, Commr. of Streets and Public Improvements, receives bids soon to pave Monroe St., Delaware St. south.

Mo., St. Louis—Streets Committee, Bd. of Aldermen, approved plans to expend \$142,000 to pave Vandeventer Ave., with granite blocks, Market to Washington St.

Mo., St. Louis—Bd. of Public Service approved expending \$4,500,000 in 1929 to build and rebuild 52.8 mi. streets.

N. C., Charlotte—City, W. C. Wilkinson, Commr., and Southern Railway, G. L. Sitton, Ch. Engr., plan eliminating curve at Southern Railway underpass, N. Tryon St.; city also plans repaving N. Tryon St.

N. C., Charlotte—State Highway Comn., Raleigh, may receive bids Dec. 19 for three 36-ft. roads in Mecklenburg County: Concord Road (North Tryon St.); Rozelle Ferry Road; Pineville Road.

N. C., Durham—State Highway Comn., Raleigh, plans top-solling road in Durham County, from Mineral Springs road to point across Wake County line.

N. C., Greensboro—Guilford County Comms. may let contract soon to widen to 30 ft., English St. extension, from High Point city limits to new State Highway No. 10.

Okla., El Reno—City, E. W. Fassett, Mgr., received low bid from Park & Co., for resurfacing streets in business section; Connolly Construction Co., \$6,526 for curb and gutter. 11-8

Okla., Hollis—Harmon County Comms. plan paving Highway No. 7, Jackson County line west to Texas boundary; also north and south highway across county. See Financial News—Bond Issues Proposed.

Okla., Muskogee—State Highway Comsn., Oklahoma City, probably let contract in Dec. for resurfacing 2½-mi. Highway 73, Muskogee city limits south; plan other work later.

Okla., Muskogee—City, Hugh Dickson, City Engr., received low bid from Gravelle & Hamblin, Barnes Bldg., Muskogee, \$39,911 for street widening; 8,692 sq. yd. 6-in. plain conc. paving, 8,369 ft. curb. 11-8

Okla., Newkirk—Kay County Comms. considering graveling 4 roads totaling 30 mi.: 8 mi. Ponca City-Blackwell; 7 mi. Ponca City-Whiteagle; 6 mi. Newkirk-Braman; 9 mi. Blackwell-Nardin; 2 mi. conc. slab on Kaw-Senic Highway; Joe Clark, County Engr.

Okla., Oklahoma City—City, E. M. Fry, Mgr., plans paving Kelley Ave. and Twentieth St.; received low bid from Western Paving Co., Petroleum Bldg., \$3.12 per yd. for rock asphalt surface on Western Ave., \$3.48 for rock asphalt on Thirtieth St., \$2.86 for rock asphalt on Seventeenth St.

S. C., Aiken—State Highway Comn., Columbia, C. E. Jones, Chmn., will start soon paving 4 mi. Augusta-Aiken Highway, from Fifth St. Bridge into Aiken County.

Tenn., Bolivar—Hardeman County Special Highway Comn. receives bids Nov. 26 to grade, drain and gravel 4 roads to be built under \$500,000 special bond issue.

Tenn., Chattanooga—City, R. H. Crox, Commr. of Dept. of Streets and Sewers, con-

sidering widening and extending Market St., Main to city limits; extend Twenty-third St., Central Ave. to Rossville Blvd.

Tenn., Nashville—Davidson County Comn. approved plans for 2 roads and 3 bridges: On Dickerson Pike, cost \$182,000; to Clarksville, \$174,769; 2 bridges on proposed Clarksville Highway, \$58,311; Stone's River Bridge, \$138,392; considering rebuilding Charlotte Pike and Nolansville road.

Tex., Alamo Heights, San Antonio—City, Mayor O'Grady, considering expending \$100,000 for street paving.

Tex., Austin—City plans 90-ft. wide paving, South Congress St., Live Oak to James; will sell bonds; Hans Helland, City Consol. Engr.

Tex., Beaumont—State Highway Comsn., Austin, considering 20-mi. boulevard between Beaumont and Port Arthur, Jefferson County.

Tex., Belton—Bell County considering paving roads.

Tex., Big Spring—Howard County Comms. Court considering paving 2 military highways across county. See Financial News.

Tex., Childress—Childress County, W. B. Howard, Judge, plans 13.570 mi. grading, draining Highway 5, Childress to Hall County line; Sumner D. Bacon, Engr.

Tex., Decatur—Wise County plans \$150,000 roads. See Financial News.

Tex., Edinburg—Hidalgo County, Cam Hill, County Clk., plans receiving bids for 45 mi. paving, Road Dist. No. 7, Donna Dist. Lately noted bids Nov. 12. 10-25

Tex., Galveston—City, E. H. Ivey, Commr., received low bid from H. J. Hetkes & Co., Security Bldg., \$1.97 per yd., to pave Ave. L, Twenty-first to Tremont St.; C. A. Holt, City Engr.

Tex., Galveston—Galveston County Comms., E. B. Holman, County Judge, receive bids Dec. 4 to shell and grade Bolivar-High Island road; John M. Murch, County Auditor; C. C. Washington, Engr. 11-15

Tex., Houston—City, Mrs. W. H. Westerman, Acting Sec., plans graveling Indiana and North Stiles St.; J. C. McVea, City Engr.

Tex., Houston—City Council authorized paving Harrisburg Blvd. to Brays Bayou; 70 ft. wide to Sixty-seventh St.; 60 ft. wide remainder of distance; estimated cost \$280,000; J. C. McVea, City Engr.

Tex., Karnes City—Karnes County, D. O. Klingemann, Judge, plans 9,205 mi. grading and bridges Highway No. 112, Karnes City-Nixon road, Kansas City to Cleto Creek; E. F. Fehrenkamp, County Engr.

Tex., Kerrville—Kerr County, Lee Wallace, Judge, considering expending \$200,000 to improve county road system. See Financial News.

Tex., Menard—City plans expending \$50,000 for street paving. See Financial News.

Tex., Newton—Newton County, R. E. Wingate, County Highway Supt., plans grading and surfacing Evangeline Highway from Louisiana via Orange, from Sabine River ferry, Deweyville, to point connecting with Orange-Deweyville Highway.

Tex., Palestine—State Highway Comn., Austin, considering paving 6 mi. State Highway No. 43, Neches to Neches River, Anderson County.

Tex., San Antonio—City, C. M. Chambers, Mayor, plans 17 mi. of paving on 17 streets; I. Ewig, City Engr.

Tex., San Antonio—City, C. M. Chambers, Mayor, received low bid from Alamo Paving Co., 321 Dawson St., \$19,535, to improve Commerce St., Mittman to Rio Grande St.; I. Ewig, City Engr. 11-8

Tex., Sinton—San Patricio County plans expending \$200,000 for asphalt road from Aransas Pass to Humble refinery at Ingleside, and other improved roads in Aransas Pass Dist. See Financial News. 11-1

Tex., Waco—McLennan County plans expending \$4,791,500 to improve roads; Mantion Hannah, County Engr.

Virginia—State Highway Comn., H. G. Shirley, Chmn., Richmond, received low bids for 3 roads: Madison County—898 mi. grading and draining, Route 16, point south of intersection with Route 37, Fredericksburg Construction Co., Fredericksburg, \$8,162; 661 mi. grading, draining, Route 16, from point south of Robinson River, Fredericksburg Construction Co., \$11,644; Sussex County—203 mi. gravel, Route 24, approaches to overhead crossing Virginia R. R., near Jarrett, Perkins & Barnes, Blackstone, \$13,100. 11-1, 11-8

Va., Petersburg—City, W. F. Drewry, Mgr., plans grading Poythress St.

Va., Princess Anne—Kempsville District of Princess Anne County plans 30 mi. roads: 9 mi. Witch Duck-Enclid Rd.; 3 mi. Indian River Rd., Norfolk County line southeast; 4.3 mi. Bayside Rd., Water Works-Ocean

Park Rd. to Virginia Beach Blvd.; 1.7 mi. Glen Rock Rd., Boulevard to Glen Rock; 1 mi. Diamond Spring Rd., Water Works Rd. to Little Creek; 2 mi. Ocean Park Rd., Copeland's Lane to Ocean Park; 1 mi. Chesapeake Beach Rd., Morning Star Chapel Rd. to Chesapeake Beach; .6 mi. Haygood Chapel Rd., Bay-side Rd. to Witch Duck Rd.; 2 mi. Holland Swamp Rd., Virginia Beach Blvd. to Norfolk Southern tracks; 3 mi. Gump Swamp Rd., Indian River Rd. southeast; 2 mi. Little Creek Rd., Norview to Diamond Springs Rd.; Absalom Rd., Absalom's Store to Witch Duck Rd. See Financial News—Bond Issues Proposed.

Va., Richmond—City, R. Keith Compton, Dir. of Public Works, considering widening Fourteenth St. Main to Carey; opening Fifteenth St. through Shockoe Valley.

Va., Roanoke—State Highway Comm., H. G. Shirley, Chmn., Richmond, considering 50-ft. boulevard approach from Williamson road.

Va., Winchester—City plans \$150,000 for street improvements. See Financial News.

W. Va., McDowell—City plans street widening, including Wyoming St. from point east of Daily News Bldg.

W. Va., West Union—Doddridge County, McClellan Road Dist., plans \$100,000 roads. See Financial News.

Contracts Awarded

Alabama—State Highway Comm., Montgomery, let contracts for 5 roads, totaling 45 mi., sand clay and gravel: Covington County—12 mi., Opp to Florala, \$12,510; 11 mi., Andalusia to Opp, \$10,896, both to Houston Foster, Luverne; Geneva County—10 mi., Geneva to Hartford, Houston Foster, \$12,481; Dale and Barbour Counties—12 mi., Arion to Louisville, E. P. Toulmin, Toulminville, Mobile, \$11,350. 10-18

Ala., Montgomery—City Comm. let contract to Hodgson & Jones, N. Perry St., \$16,874, to pave Gilmer Ave., Felder to Fairview; J. M. Garrett, City Engr. 11-8

D. C., Washington—Dist. Commrs. let contracts to G. B. Mullin & Co., Inc., 1296 Upshur road, N. W., Washington, 36 cents per cu. yd. to grade Madison, Milmarson, Forty-fourth St., and Alton Place; to L. P. Haw, 414 Kansas Ave., N. W., 29 cents per cu. yd. to grade Eads and Forty-second St.; to Latimer & Maloney, 17th and Holly Sts., N. W., Washington, 37 cents per cu. yd. for Macomb St.

Fla., Avon Park—W. G. Kimmel, has contract, \$8,000, to grade and clay streets in Ridge Gables, on State Road No. 8, south of Avon Park, Highlands County.

Fla., Bradenton—City, R. K. Van Camp, Commr. of Public Works, let contract to Southeastern Construction Co., Bradenton, \$24,926, for 6-in. conc. pavement on Twelfth St. extension and on waterfront boulevard, from Ninth to Thirteenth St. 11-1

La., Natchitoches—City, O. F. Himel, Sec. Treas., let contract to Flenniken Construction Co., Shreveport, \$32,588, for paving 6 streets.

Miss., Ashland—Standard Highway Construction Co., Hammond, La., has contract, \$115,000, for 18 mi. dirt work and bridges on Benton County road; Pilkington Brothers, Artesia, for 5 mi. road, Benton County. 10-18

Miss., Indianola—City let contract to Dunn Construction Co., Inc., Lincoln Life Bldg., Birmingham, Ala., for 6700 sq. yds. pavement on gravel base on Main St.

Miss., McComb—Bd. of Mayor and Selectmen let contract to Merrill Engineering Co., Lamar Bldg., Jackson, for 25,000 sq. yd. street pavement, 10,000 cu. yd. excavation, 9,000 lin. ft. curb and gutter; manholes, etc.; Henry A. Mentz & Co., Const. Engrs., Hammond, La. 10-25

Miss., Meridian—State Highway Department, Jackson, let contract to W. J. Bryson Paving Co., Jacksonville, Fla., for 12 mi. road, Scott County line to Shongaloo.

Miss., Raleigh—Smith County Bd. of Supvrs. let contract to Walter J. Bryson Paving Co., Inc., W. 14th St., Jacksonville, Fla., at \$46,153 for Fed. Aid Proj. 203-A; 10.56 mi., 109,462 cu. yds. excavation, 397 cu. yds. borrow, 208 cu. yds. Class A conc., 79 cu. yds. Class C conc., 20,852 lbs. rein. steel, 2400 lin. ft. paved gutter, 3395 lin. ft. guard rail.

Missouri—State Highway Comm., Jefferson City, let contracts for 20 roads: Henry County—1.106 and 2.769 mi. 18-ft. conc., Reed & Wheelock, Clay Center, Kansas; Cedar County—3.061 and 2.135 mi. 18-ft. gravel, Kelly & Underwood, Granby, Mo.; Dade County—3.008 mi. 18-ft. chas. Allen & Kallmeyer, Steelville; Pulaski County—3.884 mi. 18-ft. gravel, Jenkins-Bowen-Barkwell, Columbia; Atchison County—1.655 mi. 30-ft. graded earth, J. H. Miller & Son, Leon, Iowa; Barton County—1.076 mi. 30-ft. graded earth, Maxwell Construction Co., Columbus, Kansas;

Boone County—2.272 mi. 30-ft. graded earth, Excelsior Springs Construction Co., Excelsior Springs; Hickory County—700 mi. 30-ft. graded earth, M. E. Gillioz, Monett; Lafayette County—1.042 mi. 30-ft. graded earth, J. H. Miller & Son; Lawrence County—3.041 mi. 30-ft. graded earth, Kelly & Underwood; Nodaway County—413 mi. 30-ft. graded earth, Geo. W. Condon Co., Omaha, Neb.; Ozark County—2.816 mi. 24-ft. graded earth, H. H. Ruddell, Madisonville, Ky.; Ripley County—3.425, 3.558 and 1.364 mi. 30-ft. graded earth, Lahar Brothers, Springfield; Platte County—1.718 mi. 18-ft. gravel, McGlone & Walesby, Glasgow, Mo.; paving alleys and conc. sidewalks, McCarthy Constr. Co., 4908 Delmar Blvd., St. Louis; tentative award; Marion County—1.569 mi. 30-ft. graded earth, Chernus Construction Co., Minneapolis, Minn.

Mo., Clayton—St. Louis County, Walter E. Miller, Clk., let contract to Industrial Track Construction Co., Title Guarantee Bldg., \$7887, to improve Ams road; to John Dillon, 2902 Indiana Ave., \$7140 to improve Milburn Ave.

Mo., Jefferson City—City, H. A. Nall, Clk., let contract to Louis Brunner to improve Vista road, Francis St. to Mo.-Pac. Ry. tracks. 9-27

Mo., Joplin—City, O. P. Mahoney, Commr. of Streets, let contract to V. E. Koch, 702 N. Pearl St., 64 cents per lin. ft. for conc. curb and gutter on Thirteenth St., Jackson Ave. to Maiden Lane.

Okla., Oklahoma City—City, E. M. Fry, Mgr., let contract to M. A. Swatek Co., 519 1/2 W. Main St., to widen South Robinson Ave., Reno to Ash; to Western Paving Co., Petroleum Bldg., to widen Reno Ave., pave Eighteenth, Nineteenth, Twentieth, Twenty-first and Twenty-second Sts. and Hardin Drive, Grand Blvd. to Highland Drive. 11-8

Tex., Corsicana—F. P. McElwath, Corsicana, awarded contract at \$112,584 for 9 mi. lateral road from Corsicana to Corbett.

Tex., Houston—A. M. Arnold & Co., 112 Buffalo St., has contract, \$45,217, to pave Navigation Blvd., Buffalo to Canal St.

Tex., Rockdale—City let contract to F. P. McElwath, Corsicana, \$258,005, for 119,000 sq. yd. rein. conc. paving, 56,000 lin. ft. rein. conc. curb, etc. 11-1

Tex., San Angelo—City Commn. let contract to L. E. Whitman & Co., 1901 Austin St., Wichita Falls, \$2.17 per sq. yd., for 4 blocks of paving.

Sewer Construction

Sewer construction in LAND DEVELOPMENT projects involves the expenditure of large sums of money. Under that classification details of these improvements are reported.

Ala., Birmingham—City Comm. construct sewerage system in 4 blocks, 72d St.; cost \$30,600; A. J. Hawkins, City Engr.

Ky., Ashland—City, H. L. Carroll, Clk., plans \$400,000 sewer construction. See Financial News.

La., Shreveport—H. A. Forrest, 918 Short St., New Orleans, has contract for sewers on Gilbert St.; contract for Jordan and Melrose Sts. sewers not let. 11-1

La., West Monroe (Branch of Monroe)—City votes Dec. 18 on \$12,000 bonds for sewers. See Financial News.

Miss., Hattiesburg—See Roads, Streets, Paving.

Miss., Hazlehurst—F. D. Harvey Co., 688 S. Bellevue Ave., Memphis, Tenn., has contract for sewer system, Georgetown and E. Railroad Ave.

Mo., California—City soon receives bids for 28,000 ft. 8-in. vit. clay sewers.

Mo., Marshall—C. W. Pool and R. P. Estill, Richmond, have contract for storm sewers, culvert retaining walls and culverts.

Mo., St. Louis—City has preliminary plans for reconstructing sewers in Louisa St.; W. W. Horner, Engr., City Hall.

Okla., Muskogee—City votes Nov. 27 on \$100,000 storm sewer bonds; Hugh Dickson, City Engr.

Okla., Purcell—City voted \$22,500 sewer bonds. 10-18

S. C., Aiken—City, Frank P. Henderson, Mayor, receives bids Dec. 4 for sanitary and storm sewers. 11-8

Tex., Archer City—Roebeck-Humphrey, Omaha, Neb., has contract at \$38,000 for vit. tile sewers, sewage treatment plant, etc. 10-4

Tex., Dallas—City, Major E. A. Wood, City Plan Engr., Col. S. E. Moss, Water Commr.,

opens bids in about 6 months for sewage disposal remodeling, constructing 3 large interceptors and other lines and for equipment, cost \$4,000,000; install about 10 miles of 60-in. pipe, additional Imhoff tanks, pumps and blowers; W. S. Tanner, Ch. Engr., P. H. Hemphill, Asst. Engr. See Want Section—Machinery and Supplies. 10-11

Tex., Dayton—City plans \$40,000 sewerage system. See Financial News.

Tex., Houston—City plans sewer system in Memorial Park.

Tex., Paris—City, J. M. Crook, Mayor, plans sewerage system, disposal plant, etc.

Va., Boydton—City plans \$29,000 sewerage system. See Financial News.

Va., Winchester—City plans voting on bonds for sewers. See Financial News.

W. Va., Parkersburg—John P. Harvey Co., 2312 Rivermont Ave., Lynchburg, Va., reported, low bidder at \$20,634 for sanitary sewer east and south of City Park, Sec. B.

Telephone Systems

La., Bastrop—Southern Bell Telephone and Telegraph Co., main office Atlanta, Ga., acquired site, Hickory and Vine Sts., will erect brick building.

S. C., Laurens—Continental Telephone Co., A. O. Knell, Abbeville, Dist. Mgr., plans installing automatic telephone system; \$25,000.

Tex., Abilene—Southwestern Bell Telephone Co., main office St. Louis, Mo., negotiating to take over and operate private telephone system of West Texas Utilities Company.

Textile Mills.

Ala., Gadsden—Smallman Construction Co., 1109 Fifth Ave., S. Birmingham, has contract for main building of braid mill for Alabama Braid Corp.; 150x326 ft.; 1 story, sawtooth roof; Sidney M. Edelstein, Engr., Union, S. C. 11-15

Ala., Opp—Nicolas Cotton Mills installing 48 40-in. automatic looms and 2 horizontal beamers.

Ga., Columbus—Archer Hosiery Mills, 900 Front Ave., let contract to Weekley Elevator Co., 447 Edgewood Ave., for freight elevator; to Globe Automatic Sprinkler Co., 223 Peachtree St., both Atlanta, for complete heating and sprinkler systems for hosiery plant; Lockwood Greene Engineers, Inc., Wilson Bldg., Charlotte, N. C. 9-13

Ga., Lafayette—Lon Mavity, Rossville, leased Ross Hosiery Mill; will operate and enlarge.

Ga., Rome—American Chatillon Corp., 393 Seventh Ave., New York, advises now issuing plans for construction of complete mill village consisting of about 200 houses for employees and about 150 for engineers, managers, foremen, etc., together with community center and possibly stores; work on viscose plant proceeding rapidly, foundation, steel construction, filter plant, roads, etc., are complete; installation of machinery for viscose plant to begin about Dec. 15; acetate plant practically completed and installation of machinery and equipment begun; following among firms having contracts: Marsh & Truman Lumber Co., 332 S. Michigan Ave., Chicago, for lumber; McClintic Marshall Co., Oliver Bldg., Pittsburgh, steel and its erection; Alphons Custodis Chimney Construction Co., 95 Nassau St., New York, chimney; Page Steel & Wire Co., Bridgeport, Conn., fence; A. & S. Cameron Pump Works, 11 Broadway, New York, pumps; Carrier Engineering Corp., 850 Frelinghuysen Ave., Newark, N. J., air conditioning equipment; Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa., steam turbines; Allen-Sherman-Hoffman Co., 15th & Locust Sts., Philadelphia, ash hoppers; R. S. Armstrong & Brother Co., 676 Marietta St., Atlanta, machine shop; Grinnell Co., Providence, R. I., fire protection piping for Building "A" and power house, water and steam distribution, heating; J. S. Schofields Sons Co., Macon, Ga., smoke breeching; Walker Electric & Plumbing Co., Bona Allen Bldg., Atlanta, electric conduits; Weekley Elevator Co., 447 Edgewood Ave., Atlanta, elevators; De La Vergne Machine Co., 910 E. 138th St., New York, refrigerating equipment; Proctor & Schwartz, Inc., Seventh St. and Tabor Rd., Philadelphia, dryers and trucks; E. B. Badger & Sons Co., 75 Pitts St., Boston; steel and copper mixers; American Mono Rail Co., 6795 Pear Ave., Cleveland, Ohio, Monorail System and Toledo Dial Scale; Chicago Pneumatic Tool Co., 6 E. 44th St., New York, dry vacuum pumps and motors; Buffalo Foundry & Machine Co., 1543 Fillmore Ave., Buffalo, N. Y., dryers, dust collectors, etc.; Moncalvi & Co., spinning machines for Viscose; Sprout, Waldron & Co., Muncy, Pa., pneumatic conveying system; Box Crane & Hoist Corp., 2222 Ontario St., Philadelphia, Pa., hoisting cranes. Hughes Foulkrod Co., Gen. Contrs., 421 Seventh Ave., Philadelphia.

N. C., Asheville—Asheville Silk Hosiery Co., Albert Shults and David Baer, both of Lansdale, Pa., Owners, plan erecting hosiery mill on 5-acre site on Deaverview Rd.; brick and steel, initial unit 56x154 ft., to be extended to 364 ft. later.

N. C., Asheville—Babcock & Wilcox Co., 85 Liberty St., has contract for boilers, superheaters, etc., for \$1,000,000 rayon plant being built by American Enka Corp., 114 E. 32d St., New York; Riley-Sanford Stoker Corp., 103 Park Ave., has contract for stokers; Allis-Chalmers Mfg. Co., 50 Church St., contract for turbines; De LaVergne Machine Co., 926 E. 138th St., has contract for refrigerating equipment; Chicago Pneumatic Tool Co., 6 E. 44th St., all New York, contract for air compressors and vacuum pump; International Filter Co., 333 W. 25th Place, Chicago, has contract for filter plant equipment; Lockwood Greene Engineers, Inc., 100 E. 42d St., New York, Consol. Engrs. 10-18

N. C., Charlotte—W. C. Wilkinson, Realty Bldg., Charlotte; A. G. Myers, Citizens Bk. Bldg., Gastonia, reported, interested in consolidation of number of mills in Gastonia, Charlotte and other towns in immediate vicinity.

N. C., Charlotte—Persons in Charlotte well informed of negotiations with Rayon Company of America, D. B. Hilliard, Pres., report \$3,000,000 plant will not be erected; negotiations ended. 10-25

N. C., Durham—Golden Belt Mfg. Co., E. Main St., plans \$150,000 addition to full fashioned hosiery mill; install \$500,000 equipment.

N. C., Swannanoa—Beacon Mfg. Co., Providence, R. I., constructing addition to blanket mill, double output; move machinery from plant at New Bedford, Mass.; George Baker, Providence, R. I., Engr., supervising work.

Okl., Altus—C. W. Schimmelpfennig, Shreveport, La., Pres., L. H. Gilmer Co. of La., reported, interested in establishment of textile mill.

S. C., Anderson—Anderson Hosiery Mill plans installing additional machinery.

S. C., Spartanburg—C. H. Deal, reported, interested in construction of Character Cloth mill; has under consideration sites at Spartanburg and near Danville, Va.; cost about \$100,000.

S. C., Spartanburg—Drayton Mills let contract to Noland Co., Inc., Morgan Ave., Spartanburg, for plumbing fixtures; R. D. Cole Mfg. Co., Newnan, Ga., for steel tanks; Automatic Sprinkler Corp. of America, Engineers Natl. Bank Bldg., Cleveland, Ohio, for sprinkler system for mill; Lockwood Greene Engineers, Inc., Spartanburg, S. C. 11-15

S. C., Spindale—The Spencer Corp., offering \$500,000 6½% serial gold notes through A. M. Law, Spartanburg; Frederick C. Nolting & Co., State-Planters Bank and Trust Co., both Richmond, Va.; and Alester G. Furman Co., Greenville; company is consolidation of Spencer Mills Co. and Spindale Mills Co.; proceeds to be used for expanding cloth production capacity and to provide additional working capital; upon completion of new weave shed and addition of 200 looms, corporation will have 26,520 spindles and 500 automatic wide looms, complete complementary machinery and modern village.

Tenn., Dyersburg — Dyersburg Cotton Products Co., offering \$400,000 first mortgage sinking fund 6% gold bonds, Series A, through Fourth National Co., Fourth National Bank Bldg., Atlanta, Ga., and American National Co., American Trust Bldg., Nashville, Tenn.; company incorporated under laws of Delaware, formed to unite in a new plant at Dyersburg, the business and machinery formerly operated by Adrian Knitting Co., Adrian Knitted Products Co., Adrian, Mich., Sauquoit Knitting Co., Sauquoit, N. Y.; Oswego Yarn Mills, Inc., Oswego, N. Y.; Skenandoo Cotton Co., Utica, N. Y., and certain machinery of C. T. Houghton Co., Cincinnati, O.; company will replace Adrian Knitted Products Co.; has under construction plant at Dyersburg; proceeds to be used for equipping and erecting mill and for working capital. 9-6

Tex., San Antonio—United Merchants and Manufacturers, Inc., Homer Loring, Pres., 31 Milk St., Boston, considering San Antonio site for establishing cotton mill.

Virginia—Rockbridge Textile Co., reported, let contract to Allen J. Saville, Inc., Electric Bldg., Richmond, for foundation work for 3 textile mills to cost \$1,000,000, to be erected in Rockbridge and Augusta Counties at Goshen, Craigsville and Augusta Springs; mills will manufacture woolen yarns and company will produce own raw materials,

large herds of sheep to be raised at Goshen; Lee H. Williamson, C. E. Charlottesville, in charge of construction work; will probably build power plant.

Va., Pulaski—Virginia Maid Hosiery Mills, Inc., incorporated with \$300,000 capital; T. J. Wallner, Pres., Pulaski; Harold Lichten, V.P., Philadelphia, Pa., soon ask bids for first unit, 88x102 ft., with boiler house and dye plant, all face brick, conc. and steel; install Reading full fashioned hosiery machines with daily output of 300 doz. pairs; buildings and equipment to cost approximately \$210,000; William Steele & Sons Co., 15th and Cherry Sts., Philadelphia, Pa., preparing plans.

Va., Richmond—Du Pont Rayon Co., Inc., 32nd St. and Fourth Ave., New York, let contract to McClintic-Marshall Co., Oliver Bldg., Pittsburgh, Pa., for 600 tons fabricated struc. steel for power house in connection with textile plant at Amthill.

Va., Waynesboro—DuPont Rayon Co., Inc., 32d St. and 4th Ave., New York, reported, let contract to Virginia Bridge and Iron Co., Madison Ave., N. E., Roanoke, for 500 tons steel for power plant.

Water Works

Details of water works improvements in connection with the many LAND DEVELOPMENT operations will be found under that classification.

Ala., Mobile—City let contract to Buford, Hall & Smith, Atlanta, Ga., at \$51,000 for water works equipment, including pumps. 11-8

Fla., Palmetto—City, reported, let contract for water works equipment to Fairbanks-Morse Co., 900 S. Wabash Ave., Chicago, Ill., at \$17,000 for generating unit, including 120 hp. oil burning engine, two 500 gal. low lift, one 350 gal. and two 50 gal. high lift centrifugal pumps; Palmetto Electric Co., Palmetto, for General Electric switchboard; water pipe lines connecting plant with city mains to H. A. Butler, Sarasota. 10-18

Fla., West Palm Beach—City, H. M. Tschirgl, Engr., preparing plans for rebuilding of 2 high-pressure pumping stations on downtown lake front recently destroyed by storm; stations will be stormproof, rein. conc.

La., West Monroe (Branch of Monroe)—City votes Dec. 18 on \$10,000 bonds for water works. See Financial News.

Miss., Hattiesburg — See Roads, Streets, Paving.

Miss., Hattiesburg—H. T. Tucker, Engr., recommended construction of water works system to replace one recently destroyed.

Tenn., Knoxville—Fountain City Water Co., 1414 General Bldg., capital \$100,000, incorporated; G. H. Bishop, George Dempster; install pump at Fountain City Spring and extend 12-in. main to reservoir at Black Oak Ridge. 7-5

Tex., Archer City—Roebeck-Humphrey Co., Omaha, Neb., reported, has contract at \$33,000 for water mains, elevated tank, and conc. reservoir. 10-4

Tex., Dayton—City plans expending \$60,000 to build water works. See Financial News.

Tex., Teague—City plans \$75,000 water works improvement. See Financial News.

Tex., Uvalde—City voted \$200,000 water works bonds, will acquire water works system and extend and improve.

Tex., Waco—Will Calvert has contract for well at municipal golf course, capacity 500,000 gals. daily; install steel tank, piping and electric pump.

Va., Boydton—City plans \$30,000 water works. See Financial News.

Va., Fincastle—City plans installation of water system; J. B. McCrary Engineering Corp., Atlanta, Ga., engaged to make plans and supervise installation.

Woodworking Plants

La., Ponchartroula—E. W. Vinyard erecting \$18,000 dry kiln; also erecting building.

N. C., High Point—Knox Furniture Co. acquired Premier Furniture Co., High Point, and Lambeth Furniture Co., Thomasville. 11-15

FIRE DAMAGE

Ark., Clarksville—C. E. Rouse's residence, Miller and Buchanan Sts., College Hill.

Ala., Montevallo—Wilson Drug Store; post-office (Address Postmaster).

Ga., Cordele—E. J. Reid's store; E. M. Mann's undertaking establishment; loss \$10,000.

Ky., Murray—Murray Hotel; loss \$15,000. Address The Proprietor.

Ky., Nebo—Mill and Granary of Nebo Milling Co.

La., Franklinton—Burris Hotel owned by Fred Bateman; loss \$20,000.

La., Shreveport—H. L. Owen's store; W. J. Greer & Son's store; loss \$50,000.

Md., Princess Anne — Preston Theater, owned by J. Earl Morris; loss \$10,000.

Mo., Anabel — Ed. Anderson's residence, Vine Street Road near Anabel.

Mo., Aurora—Ozark Electric Co.'s plant; Jack Zubinsky, St. Louis, owner.

Mo., Billings—Houser's residence, W. M. Swift's telephone company and other buildings; loss \$65,000.

Mo., Campbell—High and grade school building; loss \$75,000; W. A. Shy, Supt.

Mo., Monett—Marshall bakery owned by Mrs. Fay Moore; loss \$30,000.

Mo., Springfield—Powell Garage, Newton and High Sts.; loss \$30,000; Harry and Jewell Powell, Owners.

Mo., Springfield — Building occupied by Olendorf Advertising Co., 424 S. Roberson Ave.; loss \$15,000; Mrs. Mary Nearing, owner.

Mo., St. Louis—Building occupied by Marcus Hofner as North Market Feed & Coal Co., 1906 N. Whittier St.; owned by Wm. Hofner; loss \$12,000.

N. C., Charlotte — Building occupied by Kendall's Print Shop, Askins and Maxwell's stores, E. Trade St.; loss \$10,000.

N. C., Zebulon—High School at Wakelon; loss \$50,000. Address Wake County Bd. of Education, Raleigh.

Tenn., Johnson City — Montrose Court, Southwest Ave., Locust and Virginia Sts., owned by Southwest Apartment Co., Inc.; loss \$250,000.

Tenn., Pulaski — Hickman Motor Co.'s garage.

Tex., Beaumont—Clift Hotel. Address The Proprietor.

Tex., Denton—Smith-Hamilton Motor Co.'s building and 25 automobiles; loss \$60,000.

Tex., Fort Worth—Fort Worth Undertaking Co.'s building, Texas and Lamar Sts.; loss \$50,000; J. A. Shellberg, Pres.

Tex., Kingsville — Missouri Pacific Lines coach repair shop and 5 railway passenger coaches and 1 passenger motor car; loss \$175,000.

Tex., Longview—Odd Fellows Hall; loss \$25,000.

Tex., Mt. Pleasant—Dellwood Hotel, owned by W. H. Florey, Mt. Pleasant, and Mrs. R. Y. Lacy, Pittsburg, Tex.; loss \$50,000.

Va., Berkeley—Corona Chemical Co.'s plant, between Craig and Middlesex Sts.; loss \$40,000.

Va., Norfolk—Building at No. 5 Campbell's Wharf, occupied by Portsmouth Bag Co., Inc.

Va., Williamston — Baptist Church considers erecting addition. Address The Pastor.

Something About Gainesville, Ga.

Information about Gainesville, Ga., "the gateway to the mountains," probably of interest to a very wide circle, is to be found in two pamphlets issued, respectively, by the Industrial and Advertising Commission of that city and the industrial division of the Chamber of Commerce. The Gainesville Motor Club co-operates in the distribution. Gainesville is shown to be a thriving Anglo-Saxon community of about 15,000 population, easily accessible, with fine water supply and fine climate and almost every attraction for industries and home seekers. Details about the city and its section are given and the pamphlets are well illustrated.

BUILDING NEWS

BUILDINGS PROPOSED

Association and Fraternal

Miss., Belzoni—Masonic Lodge No. 547 will not be erected before Spring; lately noted to soon take bids; Emmett J. Hull, Archt., Merchants Bank and Tr. Co. Bldg., Jackson. 11-15

Mo., Jefferson City—Virginia Public Service Co., M. J. O'Connell, Div. Gen. Mgr., erect 4-story office building, Prince and Washington Sts.; work start by Jan. 1.

Okla., Oklahoma City—Labor Temple Assn., M. L. Lewis, Sec., 1227 W. Reno St., raising funds for 3-story bldg., 500 block W. California Ave.; auditorium, gymnasium, offices.

W. Va., Clarksburg—Meuse-Argonne Post, Veterans of Foreign Wars, S. Sixth St., Deem Robey, Commdr., plans \$25,000 clubhouse; may sell stock.

Bank and Office

Ala., Ensley—Ensley Holding Co., Birmingham, have plans ready by Nov. 28 for bids on superstructure of 10-story office bldg.; bids to be opened Dec. 21; basement up to first floor level; \$350,000, rein. conc. frame, brick, stone and terra cotta, 50x100 ft., tile floors, copper and tile roof; Brooke B. Burnham, Archt., Age-Herald Bldg.; W. C. Spiker, Engr., Empire Bldg.; E. W. Brunnell, Mech. Engr., Amer. Tr. Bldg., all Birmingham. 7-5

Ala., Mobile—Merchants Securities Corp., St. Francis St., affiliated with Merchants National Bank, received bids Nov. 21 for bank and office bldg., St. Joseph and St. Francis Sts.; \$750,000, rein. conc. constr., struct. steel, brick walls, stone trim, 12 stories and basement, marble and tile work, built-up roof; Warren, Knight & Davis, Archts., Empire Bldg., Birmingham; Owen & Clark, Asso. Archts., Mobile; C. A. Wilmore & Associates, Engrs., Protective Life Bldg., Birmingham. 10-18

Ga., Atlanta—Massell Realty Co., 61 Poplar St., N. W., erect 5 additional stories to 161 Spring Street Bldg.; \$200,000, 100x100 ft., rein. conc. and steel, brick walls, stone trim; E. C. Seiz, Archt., care owner.

Md., Baltimore—Southland Co., 218 N. Calvert St., plans brick office bldg.; 2 stories, 40 offices.

N. C., Asheville—Wachovia Bank & Trust Co., Col. F. H. Fries, Pres., Winston-Salem, remodel Drhumor Bldg., Patton Ave. and Church St.; \$200,000; basement, first and majority of second floors for banking quarters; offices on 2 upper floors; Hoggson Bros., Archts., 485 Fifth Ave., New York; Brown Engineers & Surveyors Co., Engrs., 45 Market St., Asheville; probably have plans ready for bids by Jan. 15.

Okla., Tulsa—Waite Phillips, Atlas Life Bldg., reported, plans 10-story, 140x150-ft. shops and office building, Fifth St. and Boston Ave.; having sketches drawn; shops and stores on first 2 floors.

Tenn., Knoxville—Eugene Frets erect 2 additional stories to 4-story Deaderick Bldg., Market St.; brick, cast stone trim, 20 offices; \$30,000.

Tex., San Antonio—Groos National Bank, 143 W. Commerce St., Franz Groos, Pres., receives bids Dec. 3 for conc. struct. steel and stone bank and office building; \$500,000, 2 stories and basement with foundation for 12 stories, 65x86 ft.; separate bids for plumbing, heating, wiring and ventilating; Henry T. Phelps, Archt., Hicks Bldg.; Beretta-Stiles Co., Inc., Const. Engr., Natl. Bank of Commerce Bldg. 9-27

Tex., Sarita—Kenedy Pasture Co. has low bid at \$64,419 from Geo. Tillman, San Antonio, for office building and 2 garages; Hardy & Curran, Archts., Nixon Bldg., Corpus Christi. 11-15

Va., Waynesboro—C. H. Hinnant, Archt.-Engr., 509 Peoples Bank Bldg., Lynchburg, have plans ready about Nov. 26 for \$100,000 store and office building; fireproof, steel and concrete.

Churches

D. C., Washington—Universalist National Memorial Church has permit for brick and conc. church and parish house, 1810 Sixteenth St., N. W.; 3 stories, \$207,000. Address The Pastor.

Fla., St. Petersburg—United Liberal Church, Dr. S. D. Butler, Pastor, erect bldg., Merrill Ave. and Mirror Lake Drive.

Ga., Atlanta—Atlanta Gospel Tabernacle erect \$35,000 bldg., Druid Circle and Euclid Ave.; brick, 2 stories, 110x80 ft., wood floors, comp. shingle roof; Chas. H. Hopson, Archt., Healey Bldg. 11-15

Ga., Atlanta—First Baptist Church, Col. B. L. Bugg, Chmn., Bldg. Comm., receives bids Nov. 30 for church and Sunday school, Peachtree St. near Fifth St.; \$450,000, fireproof, rein. conc. and brick, struct. steel, stone trim; R. H. Hunt Co., Archt., James Bldg., Chattanooga, Tenn.; Burge & Stevens, Asso. Archts., 101 Marietta Bldg. Contractors estimating: Griffin Construction Co., 452 Spring St., N. W.; Pittman Construction Co., Rhodes Bldg.; Southern Ferro Concrete Co., 70 Ellis St., N. E.; H. J. Parr Construction Co.; A. J. Krebs Co., Walton Bldg., all Atlanta; separate bids same date for mech. work, following firms estimating: Walker Electric Co.; Edw. O. Parker; Sam Donaldson; McGaughey Electric Co.; Carroll McGaughey; Stephenson & Co., Inc.; Farrell Heating and Plumbing Co.; D. T. Beggs Heating and Plumbing Co., all Atlanta. 10-4

Ga., Macon—City Council, Chas. Bowden, Chmn., Baseball Comm., selected Curran R. Ellis, 201½ Cotton Ave., as architect for \$50,000 grand stand, Sally League Ball Park; steel frame and roof, conc. construction.

Ky., Louisville—Plymouth Congregational Church, Rev. E. H. Harris, Pastor, erect \$65,000 building.

La., Denham Springs—First Baptist Church, Rev. D. E. Coule, Pastor, erecting \$25,000 building.

La., Mowata—Roman Catholic Church ready for bids about 30 days on rein. conc., brick and stone trim bldg.; \$30,000, rein. conc. foundation, built-up comp. and tile roof, sheet metal work; Wm. R. Burk, Archt., Balter Bldg., New Orleans.

Md., Baltimore—Olivet Baptist Church erect building 1510-12 Winchester St.

Mo., Kansas City—Church of Christ, Scientist, care A. H. Smith, 1214 Walheim Bldg., plans \$150,000 church, Bellevue Ave. and Ward Pkwy.; architect not selected.

Mo., Springfield—First Presbyterian Church, Rev. Oscar Lee Black, Pastor, 615 S. Fremont Ave., probably let contract within month for building; \$175,000, brick with stone trim or brick faced with stone, 41x127 ft. with 41x128-ft. wing, hardwood floors, conc. foundation, asbestos slate or natural slate roof; furnishings, equipment, etc., \$20,000; A. A. Honeywell, Archt., 413 Pennway Bldg., Indianapolis, Ind.; excavation at 1578 to W. E. Fogerson, 712 E. Elm St., Springfield. 9-20

Mo., St. Louis—St. Michael and St. George P. E. Church, Rev. Karl Morgan Block, Rector, enlarge church and sanctuary, erect memorial tower and parish house, latter to contain auditorium, gymnasium, 22 classrooms; \$300,000; Klipstein & Rathmann, Archts., 318 N. Elghth St. 6-21

Tenn., Chattanooga—Brainerd Baptist Church, organized; selected R. H. Hunt Co., James Bldg., as architect for \$100,000 building; auditorium seat 700; classrooms in basement; 75x140 ft.; \$10,000 unit to be erected first.

Tenn., Nashville—Tulip Street M. E. Church, South, Edw. W. Turnley, Chmn., Bldg. Comm., raising funds for \$50,000 Sunday school.

Tex., Big Spring—First Presbyterian Church having plans drawn by Peters, Haynes & Strange, Myrick Bldg., Lubbock, and Big Spring, for \$45,000 bldg., Seventh and Runnells Sts.; brick and stone, Gothic type. 11-8

Tex., Eastland—First Baptist Church receives bids Nov. 28 for bldg.; plans from Wm. C. Meador, Archt., 516 Dan Waggoner Bldg., Fort Worth, or from E. S. Pritchard's office, Eastland.

Tex., Frankston—Baptist Church erect \$15,000 bldg.; brick, main auditorium and basement; Mr. Maffitt, Archt., Palestine, Tex.

Va., Hopewell—Broadway Christian Church, Rev. R. V. Schmucker, Pastor, has permit for \$30,000 building, 11th Ave. near A Sts.; brown brick; auditorium and gallery seat 500; 18 classrooms in basement; 8-room Colonial parsonage.

City and County

D. C., Washington—District Engineer Dept., Roland M. Brennan, Ch. Clk., has low bid at \$9150 from English Construction Co., 1311 H St., N. W., to repair roof of Western Market; about \$25,000 in additional repairs planned.

Fla., Jacksonville—City having plans for \$75,000 city hall drawn by S. W. Ray; bonds voted. 11-1

Fla., Stuart—Martin County Bd. of Commrs., W. B. Tilton, Chmn., receives bids Dec. 4 for courthouse and jail bldg.; separate bids for heating, plumbing, elect. wiring, etc., elect. elevator, jail cell work, sterilizing plant; \$150,000, rein. conc. frame, curtain walls of hollow tile or brick or cement units, 3 stories, about 62x100 ft., rein. conc. foundation, built-up roof; plans on file after Nov. 26 at office County Clk., Building Exchanges, 19 Damatis Arcade, West Palm Beach; Suite 1427 Lynch Bldg., Jacksonville; 206 S. Franklin St., Tampa, and 37 N. E. First Ave., Miami; also at office Bert D. Keck, Archt., 354 Hibiscus Blvd., Stuart. 11-1

Ga., Moultrie—City, P. Q. Bryan, Mayor, remodel city hall; brick, conc. and wood floors, comp. roof, steam heat; T. Firth Lockwood, Archt., Murrah Bldg., Columbus.

La., Alexandria—Rapides Parish Police Jury, J. S. Wheadon, member, special comm., considers establishing penal farm.

La., New Orleans—Comms. of Finance, City Hall, received bids Nov. 20 for 1-story, stone tile and brick stable, Sixth and Saratoga Sts.; \$15,000, rein. conc. foundation, conc. floors, comp. roof; plans by A. S. Montz, City Archt.

La., Shreveport—City Comsn. receives bids Dec. 27 for plumbing and heating for \$500,000 municipal auditorium under constr.; plans from Jones, Roessle, Olschner & Weiner, Archts., Ardis Bldg., and Seymour Van Os, Asso. Archt., Merchants Bldg.; Glassell-Wilson Co., Contr., 501 Texas St. 10-25

Miss., Biloxi—City Comsn., John O'Keefe, member, plans fire station for West End Fire Co.

Miss., Hattiesburg—S. B. Berry is chmn. of board of trustees to let contract on or about Dec. 11 for brick and tile public library; \$40,000; 2 stories, 50x100 ft., wood and linoleum floors, conc. foundation, tile roof; furnishings, equipment, etc., \$7500; E. C. Hearon & Sons, Archts., 201½ West Pine St. See Want Section—Building Material and Equipment. 11-15

Miss., Hazlehurst—Copiah County Bd. of Supvrs. receives bids at meeting, first week in Dec., for remodeling courthouse; \$25,000; Emmett J. Hull, Archt., Merchants Bank Bldg., Jackson. 10-25

Mo., Greenfield—Dade County defeated proposition to erect \$100,000 courthouse. 10-25

Mo., Lebanon—Laclede County voted \$25,000 poor farm bonds. Address Bd. of Comms. 11-1 under Hospitals, Sanitariums, etc.

Mo., St. Louis—Municipal Auditorium Advisory Comsn. probably break ground within 60 days for \$5,000,000 municipal auditorium, 14th to 15th Sts., South, and Market St. to Clark Ave.; 322x493 ft., 3 stories, 162 ft. high to ridge line trusses, main section 90 ft. to ceiling and 270 ft. wide; auditorium seat about 12,000, entrance to which will be by 6 ramps; music hall seat 3500; Bedford stone exterior; plans by Plaza Commission. 11-10

Okla., Lawton—Comanche County Bd. of Comms., F. P. Aycock, County Clk., plans courthouse; \$150,000 or more, rein. conc., brick.

Okla., Tulsa—City Comsn. has low bid at \$18,990 from M. R. Grimshaw for detention hospital; A. J. Love & Co., Archts., 204½ E. Third St. 11-8

Va., Rosslyn—Arlington County Bd. of Supvrs., Wm. H. Duncan, County Clk., receives bids Dec. 3 for fireproof record building; 1 story with provision for additional story, brick, stone and conc., 42x92 ft., comp. roof; Unman & Adams, Archts., Woodward Bldg., Washington, D. C. 10-18

Va., Richmond—Board of Stadium Trustees, Col. John A. Cutchins, Chmn., Grace Securities Bldg., receives bids Nov. 21 for first unit of stadium, Belmont Ave. near Byrd Park; \$150,000; Lee, Smith & Van Dervoort, Archts., Bldrs. Exch. Bldg., Richmond; Gavin Haddon, Stadium Expert, New York. 11-15

Va., Wytheville—Wythe County Bd. of Supvrs., rejected bids for jail; G. R. Ragan, Archt., to draw new plans. 8-16

Dwellings

D. C., Washington—Mary M. Proctor has permit for brick and tile residence, 3526 Quesada St., N. W.; 2 stories, \$10,000.

D. C., Washington—Rufus C. Satterfield, Woodward Bldg., has permit for \$10,000 residence, 3244 Patterson St., N. W.; brick and tile, 2 stories.

D. C., Washington—Bettie D. Amiss has permit for \$13,000 residence, 3248 Patterson St., N. W.; brick and tile, 2 stories.

D. C., Washington—Mattie B. Morris has permit for 2 frame dwellings, 905-09 Savannah St., S. E.; 2 stories; \$10,000.

D. C., Washington—Eaton & Co., 1010 Vermont Ave., N. W., have permit for \$15,000 dwelling, 3401 Fulton St., N. W.; cinder block and brick, 2 stories.

D. C., Washington—Hedges & Middleton, Inc., 1412 I St., N. W., have permit for \$35,000 dwelling, 2701 Chesapeake St., N. W.; stone and brick, 2 stories.

Fla., Canal Point—Southern Sugar Co., Capt. F. Deane Duff, Gen. Mgr., erect 10 additional dwellings; 3 and 5 rooms; let contract in few weeks.

Fla., Miami Beach—City Builders Finance Co., Alton Road, erect \$10,000 residence and garage, 1330 Fifteenth Terrace; conc. block, 2 stories, 41x33 ft., tile and wood floors, tile roof; owner builds.

Ga., Atlanta—W. E. Mitchell, care Georgia Power Co., erect \$30,000 residence, Andrews Drive; brick, 2 stories and basement, hardwood and tile floors; architect not selected.

Ga., Atlanta—H. M. Atkinson, Electric and Gas Bldg., receives bids Nov. 21 for residence, Una Rd.; \$125,000; rein. conc. frame, common brick foundation, Du-Brik exterior, Indiana limestone and cast stone trim, gypsum block or hollow tile partitions, slate flagging, brick terrace, Georgia and Alabama marble interior work, marble, tile, cork tile, battle-ship linoleum and wood floors, slate and comp. roof; Cooper & Cooper, Archts., Bona Allen Bldg.; following contractors estimating: Plager Co., Red Rock Bldg.; Chas. Black, Jr.; W. P. Francis, 201 Luckie St., N. W.; Barbe-Thompson Co., 136 Ellis St., N. E.; H. W. Oliver; Padgett & Sutton, Silvey Bldg.; Collins, Holdbrook, Collins, Atlanta Tr. Co. Bldg. 9-27

Ga., Columbus—A. O. Blackmar, Jr., 14 11th St., erect rock veneer, stucco and half-timber residence, Peacock Woods; 2 stories, 9 rooms, hardwood floors, tile baths, asbestos shingle or tile roof, hot water heat; John C. Martin, Jr., Archt., Tate Drive.

Ga., Milledgeville—L. N. Jordan erect \$15,000 residence; brick, hollow tile, 2 stories and basement, hardwood and tile floors, slate roof, vapor heat; Claude W. Shelverton, Archt., Grand Bldg., Macon.

Ga., Rome—American Chatillon Corp. issuing plans for mill village at rayon plant; about 200 dwellings for employees and about 150 for engineers, managers, foremen, etc.; also community center and possibly stores.

La., Baton Rouge—Sacred Heart Mission Bldg. Comm., Ernest Gass, Chmn., receives bids Nov. 21 for rectory; stucco, 2 stories, rein. conc. foundation, wood floors, slate roof, tile baths, steam heat; Wm. T. Nolan, Archt., Canal Bank Bldg., New Orleans. 10-18

La., New Orleans—J. R. Stamper erect \$14,000 residence, Kingshighway and Ardmore St.; brick, 2 stories; M. D. Weeks, Archt.

La., New Orleans—Jack Wood erect \$28,000 residence, Metry Club Gardens; frame, 2 stories, tile baths, slate roof, steam heat; Lockett & Chachere, Archts., Balter Bldg.

La., Shreveport—Holy Trinity R. C. Church, Howard Doll, Chmn., Bldg. Comm., receives bids Nov. 22 for rectory, Fannin St.; \$20,000; Edw. F. Neild, Archt., City Bk. Bldg.

Md., Baltimore—E. R. Morse, Mgr., Morse Chain Co., Lexington Bldg., erect \$35,000 residence, Springlake Way; stone, 2 1/2 stories; Palmer & Lambdin, Archts., 513 N. Charles St.

Mo., Clayton, St. Louis—A. E. Philvaw, 7097 Lexington St., erect 5 brick dwellings, Hill Top View; 26x38 ft.; \$20,000.

Mo., Kansas City—Mrs. Anna M. Williams purchased homesite, 58th St. near Ward Pkwy., Country Club Ridge.

Mo., St. Louis—H. C. Staube, 5546 Maple Ave., erect \$10,000 brick residence, Wise and Highland Aves., Richmond Heights; 1 story and basement, 34x39 ft., hardwood floors, tile bath, asphalt shingle roof, vapor heat.

N. C., Charlotte—Mrs. W. F. Buchanan, 9 S. Mint St., erect \$10,000 residence, 609 Kingston Ave.; frame and brick, 2 stories.

N. C., Charlotte—J. C. McGowan, 1923 Avondale Ave., has permit for \$25,000 brick veneer residence, Queens Road, West.

N. C., Charlotte—Hamilton C. Jones, Law Bldg., has permit for \$40,000 residence.

N. C., Swannanoa—Beacon Manufacturing Co. erect about 50 operatives' dwellings, connection with plant enlargement.

Okl., Goodwill—Panhandle A. & M. College, Harry B. Cordell, Pres., deferred erection of president's home; Layton, Hicks & Forsyth, Archts., Braniff Bldg., Oklahoma City. 10-18

S. C., Columbia—Ideal Home Co. erect 6 brick veneer dwellings, S. Gregg, Oakwood and Daly Sts.; 6, 10 and 12 rooms; \$34,500.

Tenn., Alcoa—Aluminum Co. of America, Oliver Bldg., Pittsburgh, Pa., reported, plans 30 to 40 additional dwellings, Sheet Mill section.

Tenn., Chattanooga—D. M. Patton probably have plans ready by Dec. 10 for \$150,000 residence; fireproof, 3 stories, rein. conc., stone and brick walls, tile, hardwood, marble and conc. floors, slate and comp. roof; Pringle & Smith, Archts., Norris Bldg., Atlanta, Ga. 6-14

Tenn., Knoxville—Asa Ambrister, 3318 Kingston Park, announces plans for 10 dwellings, Adair Gardens; \$80,000.

Tex., Austin—R. A. Cox, 3200 Guadalupe St., erect \$20,000 brick veneer residence, E. 32nd St.; 2 stories, basement and attic, hardwood floors, rein. conc. foundation, tile bath, asbestos shingle roof, furnace heat, built-in features; H. F. Kuehne, Archt., Littlefield Bldg.; drawing plans.

Tex., Beaumont—G. W. Shively erect \$10,500 duplex, Prairie St.

Tex., Corpus Christi—Dr. E. F. Stroud, City Natl. Bank Bldg., has low bid at \$18,600 from Runk Construction Co. for residence; Henry Norton June, Archt., Nixon Bldg. 10-25

Tex., Corpus Christi—Edw. Ettel erect 10 dwellings, Fourth St.; 4 rooms; \$10,000.

Tex., Fort Worth—Mrs. Walter H. Logan, Ft. Worth Natl. Bldg., erect \$10,000 residence, 2316-18 Medford Court West; brick veneer.

Tex., Houston—B. G. Von Roeder, 2610 Brazos St., erect \$10,000 residence and garage, 1601 Ruth St., Alameda Place; brick veneer, 6 rooms.

Tex., Houston—W. L. Edmundson, Second Natl. Bk. Bldg., erect 3 brick veneer dwellings and garages, 5741 Dwinell, 2521 Wilshire and 7734 Williford Sts.; 5 and 6 rooms; \$11,000.

Tex., Houston—Braeswood Corp. erect English type dwelling, Braeswood; brick veneer, 2 stories; Carl A. Mulvey, Archt., Second Natl. Bk. Bldg.

Tex., Houston—C. J. Frankel, Electric Bldg., start work in about 1 week on 12 brick veneer dwellings, Camp Logan Addition opp. Memorial Park; 5 rooms; \$54,000.

Tex., Houston—T. W. Menefee, Prince Bldg., plans 21 frame dwellings, Lexington Place Addition; 1 story, \$35,000.

Tex., San Antonio—A. O. Newman, 1320 Rigby St., erect 2 dwellings, Haggin St.; 5 and 7 rooms; \$15,500.

Tex., San Antonio—J. G. Reaves, 2902 Broadway, erect Spanish type residence, Olmos Park Estates; 2 stories, 10 rooms, 2 baths; Marvin Eickenroht & Bartlett Cocke, Archts., Maverick Bldg.

Tex., San Antonio—John A. Williamson, 424 Mason St., erect stucco residence, Ledge Lane near King's Ct.; 2 stories; Adams & Adams, Archts., Real Estate Bldg.; bids in.

Va., Petersburg—Woods-Seward, Inc., Union Trust Bldg., erect 4 dwellings, Colonial Heights.

Va., Richmond—Dave E. Satterfield, 1203 Laburnum Ave., erect \$19,000 residence, 3223 Hawthorne Ave.; brick, 2 stories, basement and attic.

Government and State

D. C., Washington—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., receives bids Jan. 2 for constr. (except elevators) of building for Bureau of Internal Revenue; \$10,000,000; about 185,000 sq. ft. ground area, 450x400 ft., 7 stories and basement, fireproof, stone facing; Edw. H. Bennett, Consult. Archt., 80 E. Jackson Blvd., Chicago, Ill.; excavation and foundation contracts previously noted. 6-14

Ga., Fort Benning—Constructing Quartermaster, Lieut. W. M. Allison, receives bids Dec. 12 for Units A, B, C and D to be called Barracks No. 2, to house Fifteenth Tank Battalion; \$300,000; A and B 4 stories and basement, 154x50 ft. with two 60x50-ft. wings; C and D 3 stories and basement, 240x50 ft.; rein. conc. brick walls, stone trim, built-up roof, steam heat, pine tunnel, storm and sanitary sewers and water connection; separate bids for screens; following contractors estimating: John W. Cowper Co., Inc., Buffalo, N. Y., and Healey Bldg., Atlanta, Ga.; Brown-Harry Co., E. Main St., Gastonia, N. C.; Gahn Construction Co., 133 1/2 Magnolia Ave.,

Daytona Beach, Fla.; W. F. Jackson Co.; A. J. Krebs Co., both Atlanta; V. L. Nicholson, Knoxville, Tenn.; W. P. Thurston, Inc., Richmond Tr. Bldg., Richmond, Va.; Crane Co., 1800 E St., N. W., Washington, D. C.; J. C. Miller, Campbellsville, Ky.; Murch Bros. Construction Co., Rwy. Exch. Bldg., St. Louis, Mo.; Edw. S. Moore & Son, Times Bldg., St. Petersburg, Fla.; Geo. Connors Steel Co., Empire Bldg., Birmingham, Ala. See Want Section—Bldg. Material and Equipment. 11-8

Md., Baltimore—United Postoffices Corp., Indianapolis, Ind., erect bldg. east of Penna. Station between St. Paul and Calvert Sts., and lease to Government for parcel post station.

Miss., Corinth—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., has low bid at \$58,700 from Charles Weitz' Sons, 713 Mulberry St., Des Moines, Iowa, for extension and rehabilitation of post office; brick and hollow tile, stone, struct. steel and stone, marble, terrazzo, ceramic, mastic and composition floors. 11-8

Tenn., Paris—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., receives bids Dec. 17 for extension and remodeling of post office; drawings from office Supvg. Archt.

Hospitals, Sanitariums, Etc.

Ark., Little Rock—State, Harvey Parnell, Gov., may relocate State Hospital for Nervous Diseases.

D. C., Washington—District Commrs., Dist. Bldg., receive new bids Nov. 22 for remodeling power plant, Gallinger Municipal Hospital.

Fla., Winter Haven—Dr. W. T. Sampson, Investment Bldg., rejected bids for additional story to hospital; \$10,000, 20 beds, frame and stucco, 36x25 ft.; Gibbs & Kramer, Archt., Levy Bldg. 10-25

Ky., Hopkinsville—General Assn. of Kentucky Baptists recommended additions to Kentucky Baptist Hospital, Howard Hodge, Supt.

Md., Sykesville—Board of Managers Bldg. Comm., Springfield State Hospital, Room 1009, Union Tr. Bldg., Baltimore, receives bids in duplicate Nov. 27 for infirmary; plans from Henry Powell Hopkins, Archt.; Allan Burton, Asso. Archt., both 347 N. Charles St., Baltimore.

Miss., Aberdeen—Board of Aldermen, W. B. Watkins, member, erect \$50,000 hospital.

Miss., Lexington—Holmes County Community Hospital, T. J. Trull, Pres., considers erecting \$50,000 building.

N. C., High Point—St. Edwards R. C. Church may erect hospital if assistance can be secured from Duke Endowment.

N. C., Wadesboro—R. E. Little is gen. chairman of committee interested in plans for joint county tuberculosis sanatorium.

Tenn., Kingsport—Dr. W. H. Reed and associates remodel Charlemont Apts., Charlemont and Broad Sts., for general hospital; in Spring erect addition for X-ray dept.

Tenn., Nashville—Capt. Richard H. Lyle, Commr. of State Institutions, has plans nearing completion for administration and dormitory and auditorium buildings, Central Hospital for Insane; \$300,000; fireproof, rein. conc., brick, stone trim, 3 stories, conc., tile, terrazzo and comp. floors, comp. roof, steam heat; Marr & Holman, Archts., Stahlman Bldg. 10-30

Hotels and Apartments

Ark., Little Rock—W. S. Kitchen, 1107 Cumberland St., has permit for \$20,000 apartment, 1423 W. Fourth St.

Ark., Little Rock—Mrs. N. W. Townsend erect \$10,000 brick veneer apartment, 1216 Prospect St.

D. C., Washington—M. and R. B. Warren, 917 16th St., N. W., reported, erect 3 apartments, Connecticut Ave., Sedgwick and Tilden Sts., N. W.; Park & Baxter, Archts., 1800 E St., N. W.

D. C., Washington—E. M. Willis, 927 Fifteenth St., reported, ready for bids for \$250,000 apartment, First St., N. W.; Geo. T. Santmeyer, Archt., 917 Fifteenth St., N. W.

Fla., Belle Glade—Donald V. Ferguson announced that 40 to 45 room, fireproof, storm-proof hotel would be built on site of Belle Glade Hotel.

La., Shreveport—Edson Realty Co., Edson Hotel, having plans prepared by Tisdale, Stone & Pinson, Goodhue Bldg., both Beaumont, Tex., and soon call for bids for \$200,000, 4-story, rein. conc., steel, brick and stone trim, fireproof apartment and store, Milam and Edwards Sts.; elevators, sprinkler system.

Mo., Clayton, St. Louis—E. A. Simon, 7514 Buckingham Ave., erect \$40,000, 3-story brick

apartment, Wydown Blvd.; F. G. Avis, Archt., 1017 Big Bend Road, Richmond Heights.

Mo., Hermann—Hermann Hotel Corp., R. A. Breuer, Pres., plans \$100,000 brick hotel.

Mo., St. Louis—Paramount Construction Co., J. A. Pastel, Pres., 904 Chestnut St., reported, soon let contract for 9-story and basement, rein. conc., brick, cut stone apartment, 5070 Waterman Ave.; B. Shapiro, Archt., 1219 Syndicate Trust Bldg.

Mo., St. Louis—Louis J. Wencker, 1819 S. Newstead Ave., erect \$10,000, 2-story and basement, 24x50-ft. brick apartment, Labadie St. between Goodfellow and Clara Aves.; Benj. Shapiro, Archt., 1219 Syndicate Trust Bldg.

Mo., St. Louis—G. D. Willmering, 4118 W. Florissant St., preparing plans for \$200,000, 3-story brick, 60-apartment and \$40,000, 2-story, brick, 12-apartment.

Tex., Big Springs—Crawford Hotel, A. J. Crawford, Mgr., erect \$200,000, 100-room annex to 7-story hotel; Peters, Haynes & Strange, Archts.

Tex., San Antonio—Mrs. Emmy Dittmar and Associates, 505 Howard St., ready for bids about Dec. 1 for superstructure of 8-story, brick, terra cotta, rein. conc. frame apartment, Howard St. between Laurel and Cypress Sts.; foundation and basement under construction by E. W. Oeffinger, 710 Avenue A; Richard Vander Straten, Archt., 603 Travis Bldg.; Herff & Jones, Asso. Archts., 208 San Antonio Loan and Trust Bldg.; M. L. Diver, Struct. Engr., Calcasieu Bldg., 10-25

Tex., San Antonio—J. P. Forrest, Gibbs Bldg., soon call for bids for remodeling 2-story building, 215 Soledad St., into apartments; Will N. Noonan Co., Archt., Builders Exchange Bldg.

Tex., Sour Lake—Sour Lake Springs Co., incorporated with \$50,000 capital; F. H. Carpenter, Pres., Sour Lake State Bank, Pres.-Gen. Mgr., having plans prepared by Livesay & Wiedemann, 607 San Jacinto Life Bldg., Beaumont, for 4-story hotel and 2-story bath house for health resort; latter to contain baths, electric treatment appliances and cafe; Spanish type, stucco finish; also provide golf course and other improvements.

Tex., Wharton—H. Guidman erect \$150,000, 4-story, 100x300-ft. fireproof hotel.

Va., Hopewell—Van Pelt & Hunter, Hopewell, and F. R. Saunders, Richmond, reported, planning \$450,000 hotel and theater, Broadway and Main St.; L shape; hotel to contain 108 rooms, theater to seat 2000 people.

W. Va., Wellsburg—Reid Realty Co., reported, interested in erection of hotel.

Miscellaneous

D. C., Washington—Thomas F. Murray, 2011 Nichols Ave., S. E., erect \$12,500, 2-story brick undertakers' parlor, 2007 Nichols Ave., S. E.

Fla., St. Petersburg—Woman's Club of St. Petersburg, Mrs. Wendell Slaton, Pres., plans \$40,000 clubhouse on Coffee Pot Bayou, site gift of C. Perry Snell.

La., New Orleans—Turo-Shakespeare Alms-house plans home on 12-acre site in vicinity of Algiers Playground.

Mo., St. Louis—Goodwill Industries of St. Louis, 1730 N. 13th St., considering \$250,000 building program.

Tenn., Memphis—Claude Northern, Archt., Fidelity Bk. Bldg., preparing plans for \$20,000, 1-story and basement, 70x115-ft. stucco recreation lodge.

Tex., Beaumont—Beaumont Yacht Club, Bridge Kyle, Commodore, considering acquiring 700 ft. along Neches River as site for mooring wharf and clubhouse.

Tex., San Antonio—Plaza Hotel Riding Club, Jack White, Pres., San Antonio Saddle Club and other organizations interested in erection of clubhouse adjoining Olmas Basin Park; provision for polo field, 2 practice fields, etc., \$50,000 to \$75,000.

Tex., Sherman—Red River Valley Fair Assn. increase stock from \$10,000 to \$25,000 for expansion program.

Railway Stations, Sheds, Etc.

Tex., Beaumont—Missouri Pacific Lines (Beaumont, Sour Lake & Western Ry. Co.), C. S. Kirkpatrick, Ch. Engr., 204 Union Station, Houston, rejected bids for 2-story, 33x60 ft., extension and 2-story addition to freight station; built-up roof, conc. floors; A. L. Becker, Archt., 204 Union Station, Houston. 11-8

Schools

Ala., Birmingham—Alabama Baptist Convention, Dr. J. E. Dillard, Pastor, Southside Baptist Church, Chmn., Comm., approved

\$700,000 building program in next five years for Howard College; plans call for expenditure of \$350,000 within next two years; \$100,000 fireproof library, \$100,000 pharmacy and biology building, \$100,000 student activity building, \$50,000 for central heating system and other repairs.

Ala., Grand Bay—Mobile County Bd. of Education, Mobile, erect \$25,000 school.

D. C., Washington—B. F. Moore, Archt., Colorado Bldg., preparing plans for parochial school, convent and community center, 14th and G Sts.; \$350,000.

D. C., Washington—District Commrs., Room 509 District Bldg., erect 8-room addition to Parkview School; A. L. Harris, Municipal Archt.

D. C., Washington—American University Bd. of Trustees erect men's dormitory; plans to start work soon on first unit to cost \$100,000.

Fla., Bartow—Polk County Bd. of Public Instruction, A. B. Connor, Supt., having plans prepared by E. R. James, 500 Floral Ave., for \$150,000, 2-story, 180x200 ft., brick school; W. F. Cornell, Engr., 727 Chiles St., Lakeland.

Fla., Plant City—Hillsborough County Bd. of Public Instruction, Tampa, W. D. F. Snipes, Supt., receives bids Nov. 27 for \$20,000 brick building at Cork Academy. 11-15

Ga., Athens—Georgia Division, United Daughters of Confederacy, Mrs. W. Trox Bankston, Pres., Covington, plans library on campus of University of Georgia, to be known as Mildred Rutherford Historical Museum.

Ga., Acworth—Acworth Mills erect school building.

Ga., Atlanta—Bd. of Education, R. R. Ritchie, Asst. Supt., repair brick wall of Henry W. Grady Senior High School; \$10,000.

Ga., Atlanta—Agnes Scott College, J. R. McCain, Pres., plan laundry plant and power house; brick, struct. steel, built-up roof.

La., Monroe—City votes Dec. 12 on one-mill tax for establishing junior college; tentative plans include administration building with 2 wings, one gymnasium and other auditorium, \$100,000, brick. Address Ouachita Parish School Bd.

La., Shreveport—Caddo Parish School Bd. having plans prepared by Edw. F. Neild, City Bk. Bldg., for 1-story brick school at Broadmoor.

Md., Baltimore—Johns Hopkins University School of Medicine, Dr. Lewis H. Weed, Dean, Monument and Wolfe Sts., ready for bids to close in about two weeks for \$250,000, 6-story and basement, brick, Indiana limestone trim annex, Washington and Madison Sts., for physiology, pharmacology and physiological chemistry; Archer & Allen, Archts., Central Savings Bank Bldg.; C. B. Reeder, Mech. Engr., 916 N. Charles St.; following contractors asked to submit bids: Benjamin F. Bennett Building Co., 123 S. Howard St.; Cogswell-Koether Co., 406 Park Ave.; Fraire Bros. & Haigley, 19 W. Franklin St.; Consolidated Engineering Co., 20 E. Franklin St.; North-Eastern Construction Co., Lexington Bldg.; Charles L. Stockhausen Co., Inc., Gay and Water Sts.; Morrow Bros., Inc., Fidelity Bldg. 9-20

Md., Westminster—Carroll County School Bd., M. Unger, Supt., erect \$80,000 Charles Carroll High School; 2 stories, brick and steel; B. E. Starr, Archt., Spooner Bldg., 9 Market St., Harrisburg, Pa.

Miss., Clarksdale—City votes Dec. 11 or 18 on \$250,000 bonds for junior high school addition to Eliza Clark School and other public school improvements. Address Bd. of Education.

Miss., Columbia—State Building Comsn., W. C. Trotter, Sec., New Capitol Bldg., Jackson, receives bids Dec. 13 for home economics and hygiene building, dormitory, library, practical building, nursery and domestic art building at State College for Women; separate bids for plumbing, heating, electric wiring and mechanical equipment; various heights, brick, conc., steel, fireproof, tile roofs; plans from C. H. Lindsley, Archt., Lamar Life Bldg., Jackson.

Miss., Hattiesburg—State Building Comsn., W. C. Trotter, Sec., State Capitol, Jackson, received bids Nov. 22 for road improvements and power equipment and repairs; plans from Vinson B. Smith, Jr., Archt., Bank of Gulfport Bldg., Gulfport.

Miss., Oxford—State Building Comsn., W. C. Trotter, Sec., Jackson, having plans prepared by Frank P. Gates Co., Edwards Hotel Bldg., Jackson, expected to be completed by Dec. 15, for 35x80 ft. field house, 42x140 ft. gymnasium and 100x200 ft. law school at University of Mississippi; brick, rein. conc., stone trim, tile roof.

Miss., Pearson—Pearson and Pearl School Dist. Trustees considering consolidating and erecting school.

Miss., Perkinson—Vinson B. Smith, Jr., Archt., Bank of Gulfport, Gulfport, preparing plans for \$50,000, 2-story, brick, stone trim administration building at Agricultural High School and Junior College; comp. roof; C. J. Darby, County Supt. of Education.

Miss., Porterville—Kemper County School Bd., DeKalb, erect building in Consolidated School Dist. No. 2.

Mo., Carrollton—Roman Catholic Church, Rev. Father Venderstein, erect \$15,000, 1-story and basement, 52x70 ft., brick parochial school; asphalt shingle roof, steam heat; Ludwig Abt, Archt., Reigel Bldg., Moberly; day labor. 10-18

Mo., Joplin—Bd. of Education, J. A. Koontz, Supt., probably let contract latter part of December for Alcott Grade School; Felt, Dunham & Kriehm, Archts., 300 W. 47th St., Kansas City.

Mo., Maplewood, St. Louis—Bd. of Education, J. J. Bridell, Pres., 741f5 Flora Ave., ready for bids for \$195,000, 3-story, brick and rein. conc. high school, Big Bend and Manchester roads; Wm. B. Ittner, Inc., Archt., 408 Bd. of Education Bldg. 7-26

N. C., Zebulon—Wake County Bd. of Education, Raleigh, rebuild Wakelon High School destroyed by fire at loss \$50,000.

Tenn., Bristol—Bd. of Education, R. B. Rubins, Supt., considering erecting high school and converting present high school into junior high school.

Tenn., Cookeville—Tennessee Polytechnic Institute plans to start work soon on brick gymnasium; \$44,500. 10-18

Tenn., Johnson City—East Tennessee State Teachers College, Dr. Charles C. Sherrod, Pres., having plans prepared by Coile & Cardwell for first unit of central heating system; \$28,000. 10-18

Tenn., Knoxville—City, Otto Roehl, Mgr., University of Tennessee, Dr. H. A. Morgan, Pres., and Knox County considering erecting joint auditorium to cost \$600,000; city to furnish \$300,000, to be raised by bond election; University of Tennessee \$150,000 and county \$150,000; University of Tennessee Trustees expected to pass on proposition Nov. 27; main hall to seat 5000 to 6000, smaller one of 500 capacity; will be memorial to soldiers of all wars.

Tex., Austin—University of Texas, Dr. W. J. Battle, Chmn., having plans prepared by Herbert M. Greene, LaRoche & Dahl, Construction Industries Bldg., Dallas, and ready for bids soon after Jan. 1, 1929, for \$600,000, 4-story and basement, brick and conc. chemistry building and \$250,000 steel and stone library annex. 7-19

Tex., Beaumont—Bd. of Education soon call for bids for additions to 4 grade schools; Livesay & Wiedemann, Archts., San Jacinto Life Bldg.

Tex., Dallas—Bd. of Education approved plans for \$50,000 York School and probably call for bids Dec. 4.

Tex., Falfurrias—St. Joseph's Industrial College, Rev. M. S. Garrigan, San Antonio, Rev. P. C. Illigen, Falfurrias, purchased site near Falfurrias and soon start work on 2-story brick central building to accommodate 100 boys.

Tex., Huntsville—Sam Houston State Teachers College Bd. of Regents approved biennial budget including erection of \$250,000 woman's dormitory, \$85,000 home economics and rural education building and \$50,000 addition to educational building.

Tex., Houston—Bd. of Education, H. L. Mills, Bus. Mgr., receives bids Dec. 5 for 4-classroom annex to Helms School and 6-room addition to Luther Burbank School; Henry F. Jonas & Tabor, Archts., Union Natl. Bank Bldg. 10-11

Tex., Houston—Bd. of Education, H. L. Mills, Bus. Mgr., has plans by Sanford & Nunn for 2-story, hollow tile and brick stone trim addition to Jones Elementary School, 914 Elysian St.; auditorium-cafeteria on first floor, 4 classrooms above; bids in. 11-1

Tex., Madisonville—Madisonville Ind. School Dist. Trustees receives bids Nov. 28 for \$60,000, 1 and 2 story, rein. conc., steel, brick and stone trim, 10-classroom and auditorium high school; wood on linoleum floors, built-up roof; Gleescke & Harris, Archts., 207 W. Seventh St., Austin, and Second Natl. Bk. Bldg., Houston. 11-1

Tex., Progresso—Progresso Ind. School Dist. Trustees have low bid at \$23,000 from Meriwether & Sauer, Harlingen, for 1-story, 4-classroom, hollow tile and stucco school; Lloyd E. Mellor, Archt., Harlingen; W. E. Simpson & Co., Engrs., Natl. Bk. of Commerce Bldg., San Antonio. 10-25

Tex., Texarkana—Bd. of Education, Texarkana Ind. School Dist., W. H. Stilwell, Supt., considering building program; tentative plan provides for new junior high

school, addition to Dunbar negro high school and new Newtown negro school.

Tex., Donna—Bd. of Education receives bids in December for \$150,000, 2-story, brick, rein. conc. high school; auditorium to seat 1000 people; Phelps & Dewees, Archts., Gunter Bldg., San Antonio. 10-25

Va., South Norfolk, P. O. Norfolk, Sta. Berkley—School Bd., R. H. Pride, Supt., receives bids Dec. 17 for \$125,000 high school; 19 or 20 rooms, gymnasium and auditorium, library and cafeteria. 11-15

Va., Richmond—Virginia Baptist General Assn., Grace American Bldg., establish school for pastors at University of Richmond, Dr. F. W. Boatwright, Pres.

Va., Winchester—City plans vote on \$500,000 bonds to include \$100,000 for school in North Winchester. Address Bd. of Education.

Stores

Ala., Huntsville—Sterchi Brothers & Howard, furniture dealers, reorganized as Sterchi Brothers & Shumake with F. C. Callahan, Local Mgr. and J. L. Shumake supervisor of store chain in Tennessee Valley with office at Huntsville; erect 6-story business block and warehouse.

D. C., Washington—Garman Bros., 2423 Bladensburg Rd., have permit for \$10,000 2-story store and dwelling, 601 Pennsylvania Ave., S. E.

D. C., Washington—M. Gorim, 1164 Vermont Ave., N. W., reported, erect \$300,000 store and apartment, Second St. and Massachusetts Ave., N. E.; H. H. Warwick, Archt., 1104 Vermont Ave., N. W.

D. C., Washington—Wire Realty Co., Inc., 1301 Wisconsin Ave., N. W., has permit for six 1-story brick stores, 5632-36 Connecticut Ave., N. W.; \$40,000.

D. C., Washington—Rubin & Perry, 3702 Macomb St., N. W., soon call for bids for \$25,000, 2-story brick store and office, 17th and R Sts., N. W.; Geo. T. Santmeyer, Archt., 917 15th St., N. W.

Ga., Atlanta—King Holding Co. call for bids about Nov. 26 for 2-story and basement, 120x28 ft., brick store at Buckhead; A. Ten Eyck Brown, Archt., A. Barilli, Jr., Asso. Archt., Forsyth Bldg.; following contractors estimating: J. S. McCauley Co., Bona Allen Bldg.; Artley Construction Co., 181 Luckie St., N. W.; Gilbert Beers; Arthur Pew, Jr.; Converse-Myers Co., Inc.; Padgett & Sutton, all three Bona Allen Bldg.; Marbut Williams Lumber Co., 920 Marietta St., N. W.; Chas. Bernhardt, 250 Hunnicutt St.; Collins, Holbrook & Collins, Atlanta Tr. Co. Bldg.

Ky., Middlesboro—T. H. Campbell & Bros. receives bids Dec. 1 for 3-story, 50x125 ft. store to be leased to Montgomery Ward & Co., Chicago; C. C. & E. A. Weber, Archts., Ingalls Bldg., Cincinnati. 11-15

Mo., St. Louis—J. A. McBride, care J. A. McBride Mechanical Equipment Co., 2639 Locust St., having plans prepared by P. J. Bradshaw, 718 Locust St., for 1-story brick store, Sarah and Forest Park Sts.

Mo., St. Louis—G. J. Wanstrath, 717½ Chestnut St., plans store and office building.

N. C., Asheville—McLellan Stores, Inc., 445 Seventh Ave., New York, plans \$250,000 department store, Patton and N. Lexington Aves.

Okl., Oklahoma City—Sears Roebuck & Co., Chicago, leased four floors and basement of Grain Exchange Bldg. which will be remodeled for retail branch.

Okl., Tulsa—H. C. Brockman, 3901 S. Peoria St., erect \$200,000, 6-story and basement, rein. conc. and brick store, 1013 Main St.

Tex., Houston—Scott Shambaugh, 1401 Dowling St., erect \$18,000, 1-story, 75x150 ft., brick and stucco, Spanish type store, Main and Truxillo Sts.; clay tile roof; William Bordeaux, Archt., 3940 Main St.

Tex., San Antonio—Craig J. Adams, 830 W. Magnolia St., has low bid at \$11,577 from R. C. Shane Co., Builders Exchange Bldg., for 1-story, 60x70-ft., brick, hollow tile store to be leased to Saunders-Allen Co., 1617 Main St.; Adams & Adams, Archts., Real Estate Bldg. 11-8

Tex., Waco—Snaman Co., Joe Snaman, 725 Austin Ave., soon let contract for \$40,000 brick building, Austin Ave. and 7th St.

Va., Lynchburg—J. Harry Bryan erect addition and remodel store; \$20,000; bids in.

Va., Norfolk—Dr. W. T. Monroe, 35th St. and Debee Ave., has low bid from Marstella Construction Co. for \$10,000, 1-story, 28x70 ft., stucco and brick building, Granby and 35th Sts., for curb service de luxe drug store; tile and conc. floors, gravel roof; A. O. Ferebee, Archt., 353 Arcade Bldg. See Want Section—Building Material and Equipment. 11-8

Theaters

Md., Princess Anne—J. Earl Morris rebuild Preston Theater destroyed by fire at loss \$10,000.

Mo., De Soto—J. Rosen erect 3-story brick theater; C. E. Stevens, Archt., 5417 S. Grand Blvd., St. Louis.

Tenn., Chattanooga—Tivoli Theater, Emmet Rogers, Mgr., 709 Broad St., expend \$25,000 for interior decorations, furniture and furnishings, new marquee, etc.

Warehouses

Ark.-Tex., Texarkana—William Cameron & Co., Inc., Geo. M. Sullivan, Local Mgr., plans

calling bids soon for warehouse and display quarters, Lella and Seventh Sts.; 15,000 sq. ft. floor space.

Md., Baltimore—Monumental Clay Products Co., Geo. H. Haines, Pres., Munsey Bldg., has plans under way for expansion program; initial unit to be 50x100-ft. warehouse at Garrison Ave. and Western Maryland Hwy.

Tex., Houston—Continental Wire Bound Box Co., Maury and Quitman Sts., has low bid from Don Hall, Cotton Exchange Bldg., for addition to warehouse; Robt. J. Cummins, Conslt. Engr., Bankers Mortgage Bldg.

Va., Staunton—Klotz Brothers ready for bids for \$30,000 rein. conc. storage warehouse.

BUILDING CONTRACTS AWARDED

Association and Fraternal

Ky., Henderson—Ancient Free and Accepted Masons, Clarence Geibel, Chmn., Bldg. Comm., let contract to T. B. Sublett, Owensboro, for \$110,000 to \$125,000 temple, Second St. near Elm St.; plumbing and heating, Henderson Plumbing Co.; 3 stories; theater; 2 stores on first floor. 11-8

Md., Baltimore—Young Men's Christian Assn. of Johns Hopkins University let contract for \$225,000 Levering Hall to M. A. Long Co., 10 W. Chase St.; Colonial type, fireproof, rein. conc. and brick, 2 stories and basement, 103x144 ft.; cafeteria, soda fountain, service kitchen, ladies' parlor, etc.; Palmer & Lambdin, Archts., 513 N. Charles St. 10-18

Tex., Sherman—Supreme Forest Woodmen Circle, Mrs. Mary E. LaRocca, Natl. Pres., Omaha, Neb., let contract to Cowan Bros. Construction Co., Shawnee, Okla., for \$150,000 administration building as first unit of proposed \$500,000 national home for aged and orphans; 2 stories and basement, rein. conc., steel and brick, 115x127 ft., oak and conc. floors, rein. conc. foundation, slate roof; plumbing to J. C. Korloth, Sherman; wiring, Koeppen & Baldwin, Denison, Tex.; ultimate plans call for expenditure of \$50,000 in landscaping and erection of 14 two-story, 10-room brick buildings; John Tulloch, Archt.-Engr., Sherman. See Want Section—Building Material and Equipment. 11-1

Bank and Office

Fla., Jacksonville—Swift & Co., 520 W. Bay St., erect 1-story, brick veneer office building, Forsyth St. near Newnan St.; Walter J. Bryson Paving Co., Contr., W. 14th St.

Ga., Atlanta—J. J. Finnigan Co., Inc., 706 Marietta St., has contract for steel house tanks and steel smoke connections for \$750,000 Rhodes-Haverty Bldg.; Pringle & Smith, Archts., Norris Bldg.; Southern Ferro-Concrete Co., Contr., 70 Ellis St., N. E. 11-1

La., Jennings—Calcasieu National Bank of Southwest Louisiana, Lake Charles, let contract to Underwood Contracting Corp., Louisiana Bldg., New Orleans, for \$25,000 addition to branch bank; brick, stone trim, 1 story, rein. conc. foundation, marble and tile work, built-up comp. roof; Favrot & Livaudais, Ltd., Archts., Hibernia Bldg., New Orleans. 11-15

La., New Orleans—American Sheet Metal Works, 331 N. Alexander St., has sheet metal work contract for \$1,750,000 bldg. for American Bank & Trust Co.; terrazzo and tile work, Southern Tile Co., 521 Royal St., both New Orleans; exterior metal windows, S. H. Pomeroy Co., Inc., 282 E. 134th St., New York; elect. time and recording system, Stromberg Electric Co., Chicago, Ill.; J. A. Wherry, representative, 420 Camp St.; Moise H. Goldstein, Archt.; Jens Braas Jensen, Engr., both Hibernia Bldg.; Geo. J. Glover, Inc., Whitney Bldg., all New Orleans. 11-15

N. C., Raleigh—Raleigh Banking and Trust Co., W. R. Drake, Pres., let contract to John W. Hudson, Jr., Tarboro, for 8-story addition to 3-story building, Fayetteville and Hargett Sts.; \$300,000, steel frame, limestone and terra cotta front, 66x114 ft., 32,000 sq. ft. floor space, 2 high-speed elevators; H. A. Underwood Co., Archt., Merchants Bank Bldg., Raleigh. 8-30

S. C., Saxon—Saxon Mills erect addition to mill office; Lockwood Greene Engineers, Inc., Engrs., Greenville; C. H. Guest & Son, Contrs., Anderson.

Tex., Galveston—A. M. Bowles, Cotton Exch. Bldg., Houston, has waterproofing contract for 11-story office building for American National Insurance Co.; Andrew Fraser, Archt., Amer. Natl. Ins. Bldg., Galveston; L. E. Myers Co., Contr., Allen Bldg., Dallas. 11-15

Churches

Ky., Hazard—Methodist Church has broken ground for \$25,000 building. Address The Pastor.

Miss., Laurel—First M. E. Church let contract to Oden & Glenn, Hattiesburg, Miss., for 3-story Sunday school addition; alter present bldg.; \$50,000; Emile Weil, Inc., Archt., Whitney Annex, New Orleans; L. W. Duffee, Asso. Archt., P. O. Box 966, Laurel, Miss. 11-8

Tenn., Knoxville—Church of God in Christ, Elder C. F. Kyle, Pastor, let contract to J. F. & N. McMahan for \$10,000 bldg.; brick, 46x70 ft., accommodate 500. 8-9

Tex., Fort Worth—Diamond Hill Baptist Church, Rev. E. D. Reece, Pastor, started work on first unit of Sunday school; brick, 1 story, 40x70 ft., 23 classrooms; foundation to permit additional story; main auditorium later.

Tex., Junction—Baptist Church let contract at \$15,200 to Porter & Fensty, San Angelo, for hollow tile and stucco building; 1 and 2 stories, about 50x80 ft.; Will N. Noonan Co., Archt., Bldrs. Exch. Bldg., San Antonio. 11-1

Va., Berkley, Norfolk—Memorial M. E. Church, South, let contract to H. Clayton Land, 1005 Fauquier St., Berkley, for \$18,000 Sunday school annex; conc., stone, tile and stucco, 2 stories, 32x62 ft., Bruce oak floors, Barrett Specification roof; furnishings, equipment, etc.; \$2000; W. Newton Diehl, 409 W. 29th St., and H. Clayton Land, Archts., Norfolk.

City and County

Fla., Kendall—Dade County Comsn., Miami, erect \$40,000 building, Dade County Home and Hospital; day labor; lumber from Fisher Lumber Co.

La., Shreveport—City Comsn. Council let contract at \$18,130 to Strubbe McConnell, 3404 Hearne Ave., for bungalow type fire station, Line Ave. and Oneonta St.; stucco and tile, 2 stories, 45x64 ft., conc. and hardwood floors, slate roof; Henry E. Schwarz, Archt., Slattery Bldg. See Want Section—Building Material and Equipment. 11-1

M'ss., Lexington—Holmes County Bd. of Supvrs. let contract to M. T. Reed Construction Co. for \$25,000 record room; 1 story.

N. C., New Bern—City, A. H. Bangert, Mayor, let contract at \$19,843 to Jones Bros., 203 Planters Bank Bldg., Wilson, for 2-story fire station.

Dwellings

Ala., Birmingham—F. C. Basenberg, 2128 N. 12th Ave., let contract to Noblinger & Hooks for \$16,500 residence, Redmont Park; brick veneer, 2 stories, oak floors, tile baths, comp. shingle roof, vapor steam heat; Chas. H. McCauley, Archt., 708 Jackson Bldg. 9-27

Ala., Birmingham—John Cain, 2420 Tenth Ave., S., let contract to Paul Bros., 26 Ridge Drive, for \$20,000 residence, Rockridge Park; brick veneer, 2 stories, oak floors, tile baths, slate roof, vapor steam heat; Chas. H. McCauley, Archt., 708 Jackson Bldg. 11-15

Ala., Birmingham—F. E. Dunlap, 1010 11th Ave., S., erect \$22,500 residence, Mountain Brooke Estates; brick veneer, tile baths, steam heat; Chas. H. McCauley, Archt., 708 Jackson Bldg.; J. L. Stephens, Contr.

Ala., Florence—Rockwood-Alabama Stone Co. erect 22 dwellings; 1 and 2 stories, 5 rooms; \$30,000; Richardson Lumber Co., Contr., Florence and Sheffield.

Ark., Little Rock—Sun Building and Development Co., Rector Bldg., has permit for \$10,000 dwelling, 1801 N. Spruce St.

D. C., Washington—Dewey & Co., Inc., Southern Bldg., receiving sub-bids on \$12-

000 dwelling, 3834 Legation St., N. W.; frame, 2 stor.; Wm. H. Douden, Archt., Hill Bldg.

D. C., Washington—W. C. & A. N. Miller, 1119 17th St., N. W., have permit for 2 brick dwellings, 3715-20 Van Ness St., N. W.; 2 stories; \$12,000; owners build.

D. C., Washington—Jos. M. Stanley, 1436 R St., N. W., erecting \$12,000 Colonial residence, 3505 Patterson St.; brick, 2 stories, 25x35 ft., oak floors, asphalt roof; W. B. Honey, Archt., 1235 Morse St., N. E.; engineering by owner. See Want Section—Building Material and Equipment. 11-15

D. C., Washington—Waverly Taylor, Inc., 1522 K St., N. W., completed foundations for 9 brick and stone dwellings, 44th and ??? Sts., N. W.; 2 and 3 stor.; 20x32 ft., oak floors, slate roofs; plans and constr. by owner. See Want Section—Building Material and Equipment. 11-5

D. C., Washington—Boss & Phelps, 1417 K St., N. W., have permit for 5 brick dwellings, 1800-04 Forty-fourth St. and 4401-03 Greenwich Pkwy., N. W.; 2 stories; \$51,500; owners build.

D. C., Washington—Breuninger & Co., 1103 Vermont Ave., N. W., have permit for \$10,000 brick and tile dwelling, 3834 Legation St., N. W.; 2 stories; owner builds.

D. C., Washington—Thrifty Building Co., Union Tr. Bldg., erect 12 brick and tile dwellings and garages, 508-18 Concord Ave., N. W.; 2 stories; \$39,000.

Fla., Coral Gables, Miami—S. R. Carroll erect \$24,500 residence and garage; conc. block, tile and wood floors, 2 stories, tile roof; owner builds.

Fla., Jacksonville—H. E. Etter, 4655 French St., erect 2 brick veneer dwellings, 1038-1048 Dancy St.; 1 story, \$4700 each; P. S. Clarkson, Contr., 136 Mallory St.

Fla., Miami—Tropical Homes, Inc., Lincoln Rd., started work on \$45,000 dwelling, Indian Creek; Colonial Spanish hacienda type, 3 tile baths; plans by builder.

Fla., Tampa—Frost Construction Co., 607 Marion St., erect \$25,000 French type dwelling, Davis Islands; stucco and hollow tile; Schumacher & Winkler, Archts., 610 Magla St.

Ga., Atlanta—J. O. Ashton, 315 Clairmont Ave., East Point, erect 2 brick veneer dwellings, 1736-42 Melrose Drive, S. W.; 6 rooms and bath, hardwood floors, comp. roofs, hot air heat; \$10,000; owner builds.

Ga., Columbus—Harry F. Lowe erecting \$13,000 residence; brick, 1 story, hardwood floors, asbestos shingle roof, tile baths and porch; John C. Martin, Jr., Archt., Tate Drive, Columbus; Opelika Lumber Co., Contr., Opelika, Ala.

La., New Orleans—Philip Schneller, Contr., 4141 Orleans St., erect double dwelling, Alexander and Toulouse Sts.

La., New Orleans—Maxwell & Rector, Contrs., 714 Union St., erect 3 double dwellings, Oleander and Dublin Sts.

La., New Orleans—L. Armon, 5771 Ridgeway St., drawing plans for 2 brick and 1 stone tile single dwelling, Metairie sub-division; work by sub-contract.

La., New Orleans—W. E. Weinright, Canal Bank Bldg., erect 2-story duplex, 2932-34 Cleveland Ave.

La., New Orleans—L. Sampere, 6139 St. Claude St., erect double residence, Claiborne St. near Delery St.

La., New Orleans—W. W. Carre, 831 Perdido St., erect double residence, 1006-08 S. Genois St.

La., Shreveport—W. L. Trimble, 610 Herndon Ave., let contract to J. M. Brown, 210 Milam St., for \$40,000 residence, Wilkinson St. and Fairfield Ave.; brick, 2 stories, tile roof, warm air heat; Edw. F. Neild, Archt., City Bank Bldg. 11-1

Md., Baltimore—A. L. Klein, 110 E. Lexington St., erect \$10,000 residence and garage, 213 Witherspoon Rd.; brick, 2½ stories, 37x44 ft., slate roofs, hot water heat; Cyril H. Hebrank, Archt., 3 E. Lexington St.; Philip S. Morgan, Contr., 11 E. Lexington St. 11-15

Md., Baltimore—Miss Virginia Boteler erect \$25,000 residence and garage, 4221 Greenway; stone, 2 stories, 80x87.6 ft. and 22.8x22 ft., 12 rooms, 4 baths, slate roofs, hot water heat; H. A. Stilwell, Archt.; Peyton B. Strobel Co., Contr., both 206 E. Lexington St.

Miss., Waynesboro—Frank McCormick let contract to Norman Contracting Co., Laurel, for \$15,000 residence; brick veneer, hardwood floors, tile baths, tile roof; P. J. Krouse, Archt., M. & W. Bldg., Meridian, Miss. 10-11

Mo., Cape Girardeau—Wm. Vedder let contract to Boren Bros. for brick bungalow, 1005 Themis St.; 1 story; Reither & Lindsay, Archts., 523 H. & H. Bldg. 11-8

Mo., Joplin—J. H. Rabbitt, 3540 Oak Ridge Drive, erect second unit of 5 dwellings, Garden Park addition; ultimate plans call for 40 additional dwellings.

Mo., St. Louis—Michael S. Bonfa, 4908 Delmar Blvd., erect \$12,000 residence, Richmond Heights; 2 stories and basement, 38x27 ft., hardwood floors, tile bath, incinerator, tile roof, hot water heat.

Mo., St. Louis—Alvin L. Bauman, 5646 Kingsbury Blvd., erect \$30,000 brick residence, Westwood Country Club grounds; 2 stories and basement; Maritz & Young, Archts., Chemical Bldg.

Mo., St. Louis—A. C. Beckemeier, Intl. Life Bldg., erect \$12,000 brick residence, 5701 S. Grand Blvd.; 2 stories and basement, 32x39 ft., hardwood floors, tile bath, slate roof, hot air or hot water heat; E. Preisler, Archt., 133 S. 11th St.; work by sub-contract.

Mo., St. Louis—L. E. Lortz, 5938 Lindell Blvd., erect \$20,000 residence, 5615 Lindell; brick, 2 stories, 66x37x27 ft., slate or tile roof; plans and constr. by owner.

Mo., St. Louis—M. Bauman, 220 Wainwright Bldg., erect 2 brick dwellings, 4122-24 Utah St.; 1 story and basement, 26x40 ft., hardwood floors, tile baths, asphalt shingle roof; hot air heat, \$7000 each; Hamilton Construction Co., Contr., Wainwright Bldg.

Mo., St. Louis—A. G. Schramm, 4918 Fountain Ave., erect 2 brick dwellings, 6209 Oleatha and 6418 Potomac St.; 1 story and basement, 24x39 ft., hardwood floors, tile baths, comp. shingle roofs, hot air heat; work by sub-contract.

Mo., St. Louis—Ewald Schroeder Construction Co., 8316 Racquet Drive, Belnor, erect 4 dwellings, Racquet Drive; brick, 2 stories and basement, rubble stone foundations, asphalt shingle roofs, hardwood floors, tile baths, hot water heat; Schulte & Tarling, Archts., 2806 N. Grand Ave.; owner builds.

Mo., St. Louis—Andy Hellwig, 4215 N. Euclid Ave., erect \$12,000 duplex; brick, 2 stories and basement, 24x43 ft., hardwood floors, tile bath, comp. shingle roof, hot water heat; Albert Meyer, Archt., Cent. Natl. Bk. Bldg.; August Winkle & Son, Contrs., 1810 N. Leffingwell Ave.

Mo., University City, St. Louis—Victor Rahmoeller, care Carl E. Etz, Archt., Title Guar. Bldg., St. Louis, erect \$10,000 residence, 7200 Forsythe Blvd.; 2 stories and basement, 29x32 ft., hardwood floors, tile bath, comp. shingle roof, hot water heat; A. J. Moellenbach, Contr., 6312 Victoria Ave.

Mo., University City, St. Louis—H. Grellner, 3521 S. Grand Blvd., erect 2 brick dwellings, 7251-55 Princeton Ave.; 2 stories and basement, 43x25 ft., hardwood floors, tile baths, comp. shingle roofs, hot water heat; John W. Miller, Contr., 5329 Robert Ave.

Mo., University City, St. Louis—Paul A. Schaaf, 5308 Quincey St., erect \$12,000 brick residence, 7139 Cornell Ave.; 2 stories and basement, 35x34 ft., hardwood floors, tile bath, showers, asphalt and tile roof, hot water heat; Gerhard Becker, Archt., 435 Georgia Ave., Ferguson; John M. Mueller, Contr., 2330 Russell Ave.

Mo., University City, St. Louis—E. R. Smith, erect \$10,000 residence and garage, 6926 Princeton Ave.; 2 stories, brick, 35x56 ft., slate roof, vapor heat; T. L. Johnson, Archt., 6925 Columbia St.; owner builds.

Mo., University City, St. Louis—L. E. Brockmeier, 7231 Stanford Ave., erect \$12,000 residence, 7221 Stanford; brick, 1½ stories and basement, 30x42 ft., hardwood floors, tile roof, tile bath, hot water heat; Geo. B. Wilmering, Archt., 4118 W. Florissant Ave.; J. C. Brockmeier, Contr., 7231 Stanford.

Mo., University City, St. Louis—Wm. Dorham, 5945-A Cote Brillante, erect \$12,000 residence, 7210 Stanford Ave.; brick, 1½ stories and basement, 38x38 ft., hardwood floors, tile bath, tile roof, hot water heat; Gerhard Becker, Archt., 425 Georgia Ave., Ferguson; owner builds.

Okla., Pawhuska—Agnes Wagoshe let contract at \$28,700 to John Thurman, for brick veneer residence; 2 stories, 54x64 ft., oak floors, conc. foundation, asbestos roof; Harry D. Joll, Archt. 11-1

Tenn., Knoxville—R. S. Tester, Arnold Apts., completed foundation for English type residence, Hillvale Circle; stucco and half-timber; W. A. Rutherford, Archt.

Tex., Alice—Judge W. R. Perkins let contract for \$17,000 residence to H. E. Woodruff, Nixon Bldg., Corpus Christi; brick, rein. conc., cast stone, 2 stories, about 60x46 ft., metal lath, wood, tile and linoleum floors; Henry Norton June, Archt., 911 Nixon Bldg., Corpus Christi. 10-25

Tex., Beaumont—J. B. Price, 1455 North Ave., let contract to Grady Fancloth, Port Arthur, for \$25,000 residence; foundation in; brick veneer, 2 stories, 33x66 ft., oak floors; plans by Contr. 11-8

Tex., Eagle Pass—Harry Sielski and W. B. Stroman each erecting residence, Hill Crest; R. H. Bibolet erecting residence, Madison St.

Tex., Galveston—Mrs. Sally Truehart Williams erect \$15,000 hollow tile and stucco residence, 1616 Broadway; Max Roitsch, Contr., 3417 P St.

Tex., Houston—John H. Tucker, 803 Kipling St., let contract to River Oaks Corp. for \$50,000 English type residence, 3230 Del Monte Drive; brick veneer, 2 stories, 11 rooms; Chas. W. Oliver, Archt., River Oaks Bldg. 11-15

Tex., Houston—L. Bosco, 1304 Lorraine St., let contract to Henry H. Yates, Humble Bldg., for \$15,000 brick veneer residence. 11-8

Tex., Houston—E. L. Crain, Pres., Houston Investment Co., erect hollow tile and stucco residence, Live Oak and Prospect Sts., Riverside Italian type, stone trim, 2 stories; Wm. Ward Watkin, Archt., Scanlan Bldg.; Thos. T. Hopper Co., Contr., Post-Dispatch Bldg.

Tex., Houston—J. O. Berlowitz, Cotton Exchange Bldg., erect \$15,000 residence, 2321 Southmore Blvd., Riverside; brick veneer, 2 stories, 10 rooms; L. Gabert, Archt., 1315 Bell St.; day labor.

Tex., Llano—O. G. Porter and Chas. Milliger each erecting residence.

Tex., Ozona—A. C. Hoover let contract to Reeves & Son, San Angelo, for \$30,000 residence; brick and tile, 2 stories and basement, 40x60 ft., oak floors; Will N. Noonan, Archt., Bldrs. Exch. Bldg.; Homer M. Matthews, Engr., Bedell Bldg., both San Antonio. 11-15

Tex., San Antonio—Texas Coast Lumber Co. erect 3 brick veneer dwellings, 417-25-37 Southern St.; 5 and 6 rooms; \$12,000; S. G. Pennington, Contr.

Tex., San Antonio—Guaranty Building Corp., L. E. Fite, Pres., 317 W. Travis St., plans 70 additional dwellings, Fulton Ave., Parkmoor Place; \$600,000.

Tex., San Antonio—A. O. Neuman, 1320 Rigby St., let contract to Rodgers & Crosby for \$15,000 dwelling, Greer and Lynhurst Sts.; Spanish type, tile and stucco, 1 story, rein. conc. foundation, tile roof; Harvey P. Smith, Archt.; W. E. Simpson & Co., Conslt. Engrs., both Natl. Bank of Commerce Bldg.

Government and State

D. C., Washington—Treasury Dept., Jas. A. Wetmore, Act. Supvy. Archt., let contract to Rust Engineering Co., Amer. State Bank Bldg., Pittsburgh, Pa., and Dist. Natl. Bank Bldg., Washington, for 8-story and basement fireproof extension to Government Printing Office; \$1,000,000; mechanical equipment (except elevators) to Virginia Engineering Co., Inc., First Natl. Bank Bldg., Newport News, Va., at \$96,900; structure to contain about 2,700,000 cubic feet. 10-25

Hospitals, Sanitariums, Etc.

Ark., Dumas—Dr. A. Isom erecting \$12,000 sanitarium; frame and stucco over National Steel fabric lath, 1 story, 28x127 ft., Carey roof; furnishings, equipment, etc., \$8000; W. E. Leek, Archt.-Contr. 11-1

D. C., Washington—Army Medical Center erect brick and conc. nurses' quarters; 161x35 ft. with 160x38-ft. wing, 3 stories and basement, terrazzo floors, conc. foundation; plans by owner; Murch Bros. Construction Co., Railway Exch. Bldg., St. Louis, Mo., gen. contract at \$272,000. 11-15

Miss., Gulfport—United States Veterans' Bureau, L. H. Tripp, Ch., Constr. Div., Arlington Bldg., Washington, D. C., let contract to E. E. Carroll, Madison, Fla., for officers' quarters, U. S. Veterans' Hospital; \$43,000, frame and stucco, rein. conc. foundation, asbestos roof, central heating system. 11-15

Mo., Jefferson Barracks, St. Louis—War Dept. let portion of general contract at \$43,815 to Fred R. Comb Co., 2113 Chicago Ave., Minneapolis, Minn., to rebuild burned hospital, Jefferson Barracks; \$70,000, 2½ stories, 74x26 ft., 64x46 ft. and 46x67 ft., mastic and terrazzo floors, slate roof; plans by Constr. Service, Sixth Corps Area, Chicago, Ill.; work started. 11-8

Tenn., Memphis—United States Veterans Bureau, J. Ernest Price, Exec. Officer, Constr. Div., Arlington Bldg., Washington, D. C., let contract at \$65,850, to Palmer Co., 714 Throver Bldg., Atlanta, Ga., for recreation building, U. S. Veterans Hospital. 11-8

Tex., Dallas—Dallas Medical and Surgical Clinic, Haskell Ave. and Live Oak St., Dr. David Spangler, member, erect \$100,000 addition; face brick and hollow tile, 2 stories and basement, 112x35 ft.; 2 operating rooms and offices on first floor; cafeteria, diet kitchens and laboratory in basement; J. A. Pitzinger, Archt., S. W. Life Bldg.

Tex., Houston—City Council let contract at \$11,500 to B. P. Panas, Blinz Bldg., for

brick boiler house, Jefferson Davis Hospital; mech. work, Dixie Heating & Ventilating Co., 109-11 Fannin St.; elect. work, Caywood Electric Co., 742 E. 10 $\frac{1}{2}$ St.; smokestack, J. A. Rossiter Co., Union Natl. Bk. Bldg.

Hotels and Apartments

Ala., Huntsville—Following sub-contracts awarded on \$500,000, 12-story Russell Erskine Hotel for Erskine Hotel Corp., for which E. G. Holladay & Co., 151 Fourth Ave., N., Nashville, Tenn., has general contract: Concrete work, Bush Co., Eighth Ave., N.; Indiana limestone, Johnson Stone Co.; millwork, Rumbrecht, Langlois & Co.; steel sashes, Truscon Steel Co., all Nashville; ornamental iron work, Price-Evans Foundry Corp., Anderson Ave., Chattanooga; struc. steel, Decatur Steel & Iron Co., Decatur, Ala.; stone, Algonite Stone Mfg. Co., 4606 Chipewa St., St. Louis; hollow tile, Birmingham Hollow Tile Co., 2024 Fourth Ave., N.; rein. steel, Connors Steel Co., Empire Bldg., both Birmingham; sand, gravel and common brick, Huntsville Transfer & Building Material Co.; Marr & Holman, Archts., Stahlman Bldg., Nashville. 9-27

Ala., Tuscaloosa—Mrs. D. C. Harris, 713 S. 33d St., Birmingham, let contract at approximately \$75,000 to J. O. Holloman for three 2-story, 38x70 ft., brick veneer apartments; work started; comp. and slate roofs, oak floors; Chas. H. McCauley, Archt.-Engr., Jackson Bldg., Birmingham. See Want Section—Building Material and Equipment.

D. C., Washington—A. Joseph Howar, Bldr., 819 Fifteenth St., N. W., has permit for \$500,000, 8-story brick and tile apartment, 1722 Nineteenth St., N. W.

Ga., Atlanta—W. W. Cary, 522 Rankin St., N. E., erect \$20,000, 38x71 ft., brick veneer, 8-apartment, 383 Sixth St., N. E.; tar and gravel roof, hardwood floors, hot air heat; owner builds.

Ga., Atlanta—T. A. Hallman, 285 Alaska Ave., N. E., erect \$12,500, 2-story and basement brick veneer apartment, 781 Moreland Ave., S. E.; comp. roof, hardwood floors, steam heat; owner builds.

Ga., Atlanta—J. Russell Jordan & Son, 665 Morningside Drive, erect \$10,000, 1-story, brick veneer 3-apartment, 1631 Lanier road, N. E.; comp. roof, hardwood floors, steam heat; owners build.

Ga., Atlanta—S. P. Lee, Greenwood Ave., Decatur, erect \$50,000, 2-story and basement, brick apartment, 1130 Austin Ave., N. E.; comp. roof, hardwood floors, steam heat; owner builds, day labor.

La., Shreveport—H. Bowman let contract to J. B. White, 209 Wall St., for \$75,000, 2-story, 106x69 ft. brick and semi-fireproof 16-apartment, 340 E. College St.

Mo., St. Louis—Chas. S. Mueri, 3609 Hartford St., erect seven 2-story and basement, 52x69 ft. brick apartments, Delmar Blvd. and Hanley road; wood and conc. floors, asphalt shingle roofs; \$100,000; owner, Archt.-Bldr.; taking bids. See Want Section—Building Material and Equipment. 11-15

Mo., St. Louis—Herman B. Gottlieb & Co., 622 Chestnut St., erect \$85,000, 2-story and basement, 137x127 ft., L-shape, 20-apartment, Spring and Keokuk Sts.; tar and gravel roof, hardwood floors, terra cotta trim, steam heat; Carl E. Etz, Archt., 418 Title Guaranty Bldg.; owners build.

Mo., St. Louis—Argyle Realty Co., Nathan Alpers, 1237 N. 13th St., erect \$100,000, 3-story and basement, 115x81 ft., 24-apartment, Byron Ave., Blue Ridge Terrace; terra cotta trim, electric refrigeration, incinerator, hardwood floors, steam heat; Ben Shapiro, Archt., 1219 Syndicate Trust Bldg.

Mo., St. Louis—A. Garthoffner, 4955 Delmar Blvd., started work on \$10,000, 2-story and basement, 24x42 ft., brick apartment, 3016 Belt Ave.; J. M. Liebowitz Construction Co., Contr., Intl. Life Bldg.; Carl E. Etz, Archt., 418 Title Guaranty Bldg.

Mo., St. Louis—Bush-Burns Realty Co. erect two 2-story, 34x45 ft. brick tenements, 3915-21 N. 21st St.; \$28,000, built-up paper and pitch roofs, hot air heat; Duncan-Garrison Construction Co., Bldr.; M. D. Garrison, Archt., all 1105 Chestnut St.

Mo., St. Louis—F. W. Schubert, 1108 John St., let contract to H. C. Eldmann, 3501 Morganford St., for \$10,000, 2-story, 35x36 ft. brick tenement, 4470-72 Kingshighway, N. E.; asphalt roof, warm air heat; V. G. Mueller, Archt., 7340 La Vista St.

Mo., St. Louis—Hackney Building & Investment Co. erect four 2-story, 34x56 ft. brick tenements, 4018-32 Hydraulic St.; \$36,000; asphalt roofs, warm air heat; H. Tyre, Archt., both 3637 S. Grand Ave.; owner builds.

Mo., St. Louis—Wm. Fedder, care L. J. Graham, Archt., 4885 Natural Bridge Rd., erect brick residence, Claytonia Terrace,

Moorlands; 2 stories and basement, 68x30 ft., tile and hardwood floors, 2 baths, Kernator, tile roof.

Mo., St. Louis—V. Voerster, 2840 Potomac St., let contract for two \$6000, 2-story, 26x51 ft. brick tenements, 3844 Keokuk St. and 3919 Dunnica St.; slate roofs; Voerster Construction Co., Contr., 3637 S. Grand Blvd.; H. Tryer, Archt.

Mo., St. Louis—Modern Construction Co., 18 N. 18th St., erect 3-story and basement, 88x109 ft., brick, 18-apartment, Wydown Blvd.; F. G. Avis, Archt., 1021 Big Bend Blvd.; owner builds.

Mo., St. Louis—A. V. Dieckmann excavating for \$40,000, 3-story and basement, 37x70 ft. brick apartment, 1148 S. Kingshighway Blvd.; comp. roof, hardwood floors, electric refrigeration, steam heat; F. L. Dickermann, Contr., both 6009 Tennessee Ave.; Charles J. Breitschuh, Archt., 3508 Hpmphrey St.

Mo., St. Louis—Hoffman Realty Co., 4277 Ellenwood Ave., erect \$175,000, 3-story and basement, 73x140 ft., rein. conc. brick, fireproof, 33-apartment, Morganford and Neosho Sts.; built-up comp. roof, hardwood floors, terra cotta trim, vapor heat; O. J. Popp, Archt., 1528 Arcade Bldg.; 30-car garage.

Mo., St. Louis—A. Beck, 4512 Papin Ave., started work on \$18,000, 2-story and basement, 36x59 ft. brick 4-apartment, 1553-55 Tamm Ave.; comp. roof; owner, Archt.-Bldr.

Mo., St. Louis—Vem Realty Co. started work on \$15,000, 2-story and basement, 34x45 ft. brick 4-apartment, 4315-17 Tholoan Ave.; comp. shingle roof, hardwood floors, hot air heat; Zeppenfeld Construction Co., Inc., Contr., both 3508 Utah Place.

Mo., University City, St. Louis—Edwin C. and Charles J. Francis, Jr., 5003 Gravois Ave., excavating for \$25,000, 2-story and basement, 62x68 ft. brick 4-apartment, 7352 Pershing Ave.; slate roof, hardwood floors, steam heat, electric refrigeration, incinerator; Adolph Stauder, Archt., 6032 S. Kingshighway Blvd.

Mo., University City, St. Louis—F. Goodwin, 6027 Westminster Ave., erect \$12,000 residence, 7036 Stanford Ave.; 1 $\frac{1}{2}$ stories and basement, 38x37 ft., hardwood floors, tile roof, hot water heat; J. C. Brockmeier, Contr., 7231 Stanford Ave.

Mo., University City, St. Louis—E. A. Stein, 8105 Page Ave., started work on \$12,000, 2-story and basement, 24x48 ft., brick apartment, 7329 Dartmouth Ave.; comp. shingle roof, hardwood floors, steam heat; owner, Archt.-Bldr.

Mo., University City, St. Louis—E. J. Peterson, 8106 Washington Ave., excavating for \$12,000, 2-story and basement, brick apartment, 7247 Amherst Ave.; tile roof, hardwood floors, hot water heat; owner, Archt.-Bldr.

Okla., Oklahoma City—G. A. Nichols, Inc., 115 N. Harvey St., started work on \$75,000, 2-story, brick, English type apartment and store, 24th St. and Robinson Ave.

Tenn., Knoxville—J. A. Linn, 1141 N. Third Ave., let contract to H. E. Rogers, Deaderick Bldg., for \$15,000, 2-story brick veneer apartment on N. Third Ave. 11-8

Tenn., Memphis—Hotel Claridge, C. C. Seelbach, Mgr., 109 N. Main St., expend \$50,000 for improvements to include coffee shop, remodeling dining room and additional furniture; Malone and Scott Tile & Marble Co., Inc., 353 Walnut St., have charge of construction work.

Tex., Mercedes—R. P. Tindel, Contr., 347 E. Craig St., San Antonio, purchased Mercedes Hotel property and has plans drawn for hotel.

Tex., New Braunfels—New Braunfels Hotel Co., Inc., Ben W. Nuhn, Sec.-Treas., let contract at \$89,083 to Walter Sippel for 4-story, 75x100 ft., L-shape, brick, rein. conc., fireproof, 50-room hotel; plumbing and heating, \$18,807, Braden-Hudson-Wangler Co., 302 E. Commerce St.; wiring, \$7062, Graham & Collins Electric Co., 306 W. Commerce St., both San Antonio; elevators, \$5391, American Elevator Co., 117 Cedar St., New York; Harvey P. Smith, Archt.; W. E. Simpson & Co., Consitz. Engrs., both Natl. Bk. of Commerce Bldg., San Antonio. 11-15

Tex., San Antonio—H. H. Clark erect two 2-story brick veneer apartments, 903-7 Elizabeth St.; \$16,000; day labor.

Va., Pulaski—E. P. Bunts let contract to J. Foy Hall for \$50,000, 8-story, brick, conc. and steel apartment, Jefferson Ave. and 4th St., N.

Miscellaneous

Fla., Palm Beach—City Builders Finance Co., H. M. Rice, 1620 Alton road, Miami Beach, reported, erect \$200,000, 2-story, 170x90 ft., stucco on hollow tile clubhouse; owner builds.

Fla., Tampa—Societa Sicilia let contract to Wheeler Construction Co. for \$60,000, 2-story brick and steel clubhouse and theater, Howard Ave. and Spruce St.; theater to accommodate 2500 to 3000 people; Fred J. James, Archt., 706 Franklin St.

Fla., Tampa—Davis Islands Country Club remodeling and redecorating clubhouse; erecting brick, tile and stucco caddy house and professional building; Franklin O. Adams, Jr., Archt., 510 $\frac{1}{2}$ Franklin St.

Mo., Kansas City—The Girls' Club, 612 W. 11th St., let contract to J. E. Dunn, Reliance Bldg., for \$60,000, 3-story, brick dormitory, 1030-32 Pennsylvania St.; W. A. Besecke, Archt., Huntzinger Bldg.; F. L. Brown, Struc. Engr., Orear-Leslie Bldg., 10-18

Mo., St. Louis—Stupp Brothers Bridge & Iron Co., Weber Rd. and Missouri Pacific tracks, has contract for 18,000 tons struc. steel for exhibition buildings being erected by St. Louis National Exhibition Assn., Ben J. Brinkman, Pres., Forest Park Highlands; to be used by National Dairy Show. 6-28

Tex., San Antonio—Medina Irrigated Farms, Inc., Frost Bldg., erect 18 frame and stucco cottages in connection with tourist camp, Natalia, on Laredo Highway; Henry T. Phelps, Archt., Hicks Bldg.; owner builds.

Tex., Waco—Municipal Golf Courses, Inc., Box 1502, started work on foundation for 1-story, 35x45 ft. stucco, fireproof, Spanish type clubhouse; shingle roof; T. Brooks Pearson, Archt., First State Bk. Bldg. 11-15

Railway Stations, Sheds, Etc.

Ark., Texarkana—Following sub-contracts awarded on \$1,700,000 Union Station under construction, Stewart-McGehee Construction Co., Gen. Contr., Kahn Bldg., Little Rock; Rein. Iron, Sheffield Steel Corp., Railway Exchange Bldg.; enamel brick, Hydraulic Press Brick Co., Central National Bank Bldg.; ornamental plaster, Eastman Plastic Relief Co., 23rd and Dickson Sts.; rubber tile floors, David E. Kennedy, Arcade Bldg.; terra cotta, Northwestern Terra Cotta Co., 4417 Oleatha St., all St. Louis; struc. iron, Mosher Steel & Machine Co., Maple Rd., Dallas; steel sash, Truscon Steel Co., Youngstown, Ohio; rolling doors, Akers & Co., 229 Madison St., Memphis, Tenn.; face and common brick, Acme Brick Co., Anderson Bldg., Fort Worth; cut stone, Ingalls Stone Co., Bedford, Ind.; granite, Cold Spring Granite Co., Cold Spring, Minn.; millwork, Queen City Woodworks & Lumber Co., Springfield, Mo.; toilet partitions, Henry Weis Manufacturing Co., Elkhart, Ind.; marble and tile, Southwestern Marble & Tile Co., 433 W. Wash St., N. Little Rock; terrazzo, Standard Terrazzo Mosaic Co., 536 S. Kenosha St., Tulsa, Okla.; wood block floors, Jennison-Wright Co., Toledo, Ohio; plumbing, Robinson Brothers, Pine Bluff; Kalamein doors, Richmond Fireproof Door Co., Richmond, Ind.; sheet metal and roof, H. H. Bain Sheet Metal Works, 808 Reynolds St., Shreveport, La.; ornamental iron, Southern Ornamental Works, Arlington, Tex.; E. A. Hadley, Ch. Engr., Missouri Pacific R. R. Co., Railway Exchange Bldg.; E. M. Tucker, Archt., 1164 Railway Exchange Bldg.; Taxis & Becker, Consit. Engrs., Chemical Bldg., all St. Louis. 5-24

Schools

Ark., Armstrong Springs—Morris Institute let contract at \$73,300 to J. D. Brock, Arkadelphia, for 1-story and basement recreational building and 2-story and basement classroom and dormitory; brick and conc., comp. roof, conc. and wood floors; Thompson, Sanders & Ginnochlo, Archts., Hall Bldg., Little Rock. 11-8

Fla., Clewiston—Hendry County Bd. of Public Instruction, B. G. Dahlberg, Pres., La Belle, let contract to J. H. Heard for \$12,500, 1-story, 53x52 ft., stucco or hollow tile administration building addition; C. J. Lawrence, Archt., Murray Bldg., Palm Beach.

Fla., Tallahassee—State Bd. of Control, P. K. Yonge, Chmn., Carling Hotel, Jacksonville, let contract at \$84,480 to Hardin Construction Co., Lake City, for boys' dormitory at Florida Agricultural and Mechanical College for Negroes; 3 stories and basement, 122 x36 ft., rein. conc., brick, struc. steel, hollow tile, cast stone trim, slate comp. and metal roof; Rudolph Weaver, Board Archt., 200 Peabody Hall, Gainesville. 11-8

Ga., Savannah—Bd. of Education let contract for high school, Battery St., to The Artley Co., 504 E. Bay St., at \$277,000 with auditorium and \$213,000 without auditorium; 2 stories and basement, 300x82 ft., with wing 117x32 ft., rein. conc., hollow tile, brick, cut art stone trim, Barrett roof, conc., tile and maple floors; Wallin & Comer, W. P. Marshall, both Realty Bldg.; Percy Sudden, Asso. Archt.; Levy & Clark, Suprvz. Archts., Blum Bldg.; Cletus W. Bergen, Consit. Archt., all Savannah; W. C. Spiker, Engr., Forsyth Bldg., Atlanta. 10-18

La., Columbia—Caldwell Parish School Bd. let contract at \$49,824 to Tudor & Hatchell, Alexandria, for 2-story, rein. conc., brick and stone trim high school; J. W. Smith & Associates, Architects, Ouachita Natl. Bank Bldg., Monroe. 10-23

La., Oak Grove—West Carroll Parish School Bd. let contract at \$23,324 to Tudor & Hatchell, Alexandria, for alterations and 2-story brick addition to school; J. W. Smith & Associates, Architects, Ouachita Natl. Bk Bldg., Monroe. 11-13

Md., Baltimore—Following additional sub-contracts awarded on \$500,000, 4-story educational building under construction at Belvedere and Roland Aves. for St. Mary's Seminary, the M. A. Long Co., Gen. Contrs., 10 W. Chase St.; Granite, Oliver C. Putney Granite Co., Granite, Md.; sheet metal, W. A. Fingles, 29 S. Howard St., Baltimore; ornamental iron, Art Bronze & Iron Works; rein. steel, Penn Steel Service Co., Fuller Bldg., Philadelphia, Pa.; interior cast stone trim, Emerson-Norris Co.; plastering, Coleman & Reilly; brick work and tile partitions, Cory Masonry Corp., 10 W. Chase St.; Maginnis & Walsh, Architects, Statler Bldg., Boston, Mass.; Geo. A. Weschler, Engr., Denrike Bldg., Washington. 7-19

Md., Baltimore—W. J. Hammett Co., Old Town Natl. Bk. Bldg., will do brick work and Fred Eilenbrok, 2104 Frederick Ave., furnish cement for 5-story and basement, 166x195-ft., rein. conc., brick, steel laboratory and classroom building at University of Maryland, Lombard and Green Sts., for which Price Construction Co., Maryland Trust Bldg., has general contract; Smith & May, Architects, Calvert Bldg. 10-4

Miss., Jackson—Millsaps College, Dr. D. M. Key, Pres., let contract to I. C. Garber, Medical Bldg., for \$150,000, 2-story and basement, rein. conc., brick, limestone or cast stone trim science building; electric wiring, E. W. Cook Co., Century Bldg.; heating, Paine Heating Co., 127 S. State St.; plumbing, Fisher-Butler Co.; ventilating, Ray Wright Sheet Metal Works, 226 S. State St.; Harry N. Austin, Archt., Daniel Bldg. 11-8

Tenn., Greeneville—Tusculum College let contract to W. A. & J. E. Gervin, Contrs., 220 W. Clinch St., Knoxville, for \$45,000 Science Hall; 3 stories, brick, steel, conc. and frame; Graf & Son, Architects, Journal Bldg., Knoxville. 9-13

Tex., Beaumont—Bd. of Education, M. E. Moore, Supt., let contract at \$617,450 to McDaniel Brothers, Kyle Bldg., Beaumont, for 328x164-ft., 3-story, brick, 45-classroom high school in Oaks addition; plumbing and heating, \$67,002, Warren Shivers Co., Inc., 305 Hagerman St.; electrical equipment, \$29,659, Alan T. Cooke & Co., Esperson Bldg., both Houston; kitchen equipment, \$10,703, Albert Pick & Co., 1200 W. 35th St., Chicago; F. W. & D. E. Steinman, Architects, San Jacinto Life Bldg., Beaumont; Harry D. Payne, Constl. Archt., Kirby Bldg., Houston. 11-1

Tex., Houston—Pyramid Asbestos and Roofing Co., Butler and Sacks Sts., has contract for Pyramid Asbestos shingle and built-up tar and gravel roof of Booker T. Washington High School; T. B. Hubbard Construction Co., Gen. Contr., 1507 Shepherd St.; Henry F. Jonas & Tabor, Architects, American Natl. Bank Bldg. 10-25

Tex., Houston—American and Venetian Marble Co., 3202 Polk St., has contract for terrazzo work for \$138,500 addition to Sidney Lanier Jr. High School; West & Jensen, Gen. Contrs., Second Natl. Bank Bldg. 1-18

Tex., Waco—School Bd., B. B. Cobb, Sec., let contract at \$92,650 to J. S. Harrison Construction Co., Liberty Natl. Bk. Bldg., for 3-story and basement, 78x34 ft. addition to Senior High School, to include north wing of classrooms and basement for automotive engineering; also let contract at \$42,697 to William Smith Co., 1320 Franklin Ave., for 98x52-ft. gymnasium and auditorium building for West Ave. Jr. High School; heating and plumbing for High School addition, \$7963, Hill Bros. & Co., 705 Austin Ave.; T. Brooke Pearson, Archt., 501 First State Bk. Bldg. 11-1

Stores

Ark., Fayetteville—N. F. Drake, 501 Forrest St., completed foundation for \$60,000, 3-story and basement, 50x100-ft. brick store to be leased to Montgomery Ward & Co., Kansas City, Mo.; E. M. Ratliff, Archt. See Want Section—Building Material. 10-25

Ark., Little Rock—McGregor & Pickett, Contrs., A. O. U. W. Bldg., have permit for \$32,000, 2-story brick business building, Sixth and Center Sts.

Fla., West Palm Beach—Wiley R. Reynolds, 172 S. Ocean Blvd., let contract to Wilcox Bros., Guaranty Bldg., for \$30,000, 2-story, 23x150-ft. stucco on hollow tile store; comp.

roof, wood floors, skylights; H. S. Harvey, Archt., Guaranty Bldg.

Ga., Atlanta—J. Bukofzer, care Bass Dry Goods Co., 182 Mitchell St. S. W., erect \$10,000, 1-story, 80x70 ft., brick store, 1139-43 Ponce de Leon Ave. N. E.; tar and gravel roof; owner builds.

Ga., Atlanta—J. G. Hamm, 68 Hunter St., S. W., erect \$14,000, 1-story and basement, 40x60 and 50x80 ft., brick store and garage, 983-85 Piedmont Ave., N. E.; tar and gravel and metal roof; owner builds, day labor.

Mo., Kansas City—Klines, Inc., E. B. Kline, Pres., 218 W. 40th St., New York, Wm. H. Clark, Local Mgr., 1112-14 Walnut St., let contract to Swenson Construction Co., Shubert Bldg., for 5-story, 48x110-ft., fireproof annex and remodel 5-story store, 1112-14 Walnut St.; Wm. R. Bovard, Archt., Orear-Leslie Bldg. 7-12

Mo., St. Louis—T. M. Tarde, 5404 Itaska St., has contract for \$18,000, 2-story and basement, brick, terra cotta trim store and apartment, Seventh and Lafayette Ave.; Hiram Phipps, Archt., 4162 Castleman Ave.

Mo., St. Louis—L. J. Winston, Lee and Shreve Sts., erect \$15,000, 2-story, 33x105-ft. brick store and basement, 4135 Shreve St.; asphalt built-up roof, hot water heat; E. H. Holtman, Archt.-Bldr., 4438 Rosalie St.

Mo., St. Louis—F. Strueckel excavating for \$15,000, 2-story and basement, 23x52-ft. brick store and apartment, 6910 Virginia Ave.; hardwood floors, tar and gravel roof; F. C. Sipp, Contr., both 5142 Rosa Ave.; Leo K. Milberger, Archt., 5212 Murdock St.

N. C., New Bern—E. S. Poole, Rocky Mount, has contract to erect 2-story building for Montgomery Ward & Co., Chicago.

Tex., Houston—Following sub-contracts awarded on \$1,000,000, 7-story building, Main and Walker Sts., for Jesse H. Jones, Pres., Austin & Rusk Realty Co., Bankers Mortgage Bldg., to be leased to Levy Brothers Dry Goods Co., 309 Main St.; Southwestern Construction Co., Gen. Contr., West Bldg.; Masonry, Valley Construction Co.; painting and decorating, G. S. Patrick; cast stone, Pyramid Stone Co., National and Center Sts.; cement and hollow tile, Jones Lumber Co., 2800 McKinney St., all Houston; misc. iron and steel, Southern Ornamental Iron Works, 2425 S. Harwood St.; elevator doors and steel sash, R. J. Dewees, Slaughter Bldg., both Dallas; Joseph Finger, Archt., Keystone Bldg. 11-8

Tex., Houston—Sears, Roebuck & Co., Chicago, let contract to B. W. Construction Co., 720 Cass St., Chicago, for \$600,000, 150x300 ft., 6 or 8-story, brick retail store, Buffalo Drive and Lincoln St.; 180,000 sq. ft. floor space; provide parking space for 800 cars on both streets; pave Lincoln St. from Buffalo Drive to W. Dallas St. without cost to city; Nimmons, Carr & Wright, Architects, 333 N. Michigan Ave., Chicago. 11-15

Tex., San Antonio—Travis Investment Co., Milam Bldg., let contract to L. T. Wright & Co., Builders Exchange Bldg., for 1-story, 54x85 ft., brick, stone, tile and rein. conc., 3-story building on Travis St., adjoining Milam Bldg.; George Willis, Archt., Builders Exchange Bldg.

Tex., San Antonio—H. Partee, 605 Belknap St., let contract at \$10,500 to L. T. Wright & Co., Builders Exchange Bldg., for 1-story, 207x65-ft. brick addition to building, Avenue E, between Third and Fourth Sts.

Tex., San Antonio—Central Development Co., 407 Aztec Bldg., let contract to J. M. Oldham, 135 Porter St., for new front and interior remodeling in store, 303 W. Commerce St.; Herff & Jones, Architects, S. A. Loan & Trust Bldg.

Tex., San Antonio—Chas. Dittmar, 407 Aztec Bldg., let contract to J. M. Oldham, 135 Porter St., for new front and interior remodeling in building, 305 W. Commerce St.; Herff & Jones, Architects, S. A. Loan & Trust Bldg.

Tex., San Antonio—O. B. Carver erect \$14,000, 1-story, 50x140-ft. brick, conc. and tile store, Mesquite St.; J. W. Birmingham, Contr.

Tex., Sonora—Steve and Clara Murphy let contract to James R. Caldwell for \$12,000, 60x74-ft. building, Main St. and Concho Ave.

Tex., Victoria—A. W. Krueger started work on 1-story, 18x66-ft. brick and tile business building on W. Constitution St., to be leased to Maytag Corp., manufacturers of electrical appliances.

Warehouses

Ala., Birmingham—Alabama Vinegar Co. let contract to Thos. C. Brasfield, 5108 Gary Ave., for \$16,500, brick, stone trim warehouse, Avenue B and 32d St.; conc. floor, asphalt roof, steel trusses; Chas. H. McCauley, Archt., 708 Jackson Bldg.

Ga., Savannah—Ludlow George Bagging Co. has permit for \$14,000 warehouse on Montgomery St.; brick, comp. roof; owner builds.

Trade Literature

Shaft Machines.—Products of the Stow Manufacturing Company, Inc., Binghamton, N. Y., such as flexible shafts complete, gasoline driven unit, "Lindy" assembly, flexible radial grinder, belt driven; general utility tool, buffer and bench grinder, and so on, are described in detail, with dimensions and other features, in a pamphlet issued by that company. Stow portable electric drills are described in another pamphlet.

Circuit Breaker.—The I-T-E Circuit Breaker Company, Philadelphia, Pa., has published bulletin No. 220, covering a new type of electrical protective equipment, the new U-RE-LITE all-steel distribution groups. These are designed to give power and lighting circuits automatic protection, no fuses, and to assure greater safety for operators. All "live" parts safely encased in steel accomplishes this result.

To Handle Millers Falls Tools.

Joseph T. Ryerson & Son, Inc., with plants at Chicago, Milwaukee, St. Louis, Cleveland, Cincinnati, Boston, Buffalo and New York, have taken on the Millers Falls line of portable electric tools, products of the Millers Falls Company of Millers Falls, Mass. The Ryerson Company is a long established concern in its line.

Waste Not—Want Not. By Scoville Hamlin. Philadelphia, Pa.: Dorrance & Co. Cloth. Pp. 224. \$2.

Exhaustive study of natural resources of the United States and of all the world, and also of consumption, leads the author ultimately into discussion of waste through war and even into a review of the influence of the League of Nations. First finding that machine production has altered man's relationship to environment, the author concludes that machines can be utilized to discourage waste and to stabilize employment, and "when wages and profits are geared to maximum production there is no room for contraction; the preservation of a balance between the growth of income and the growth in units of capital and labor will insure inflexibility to the system." Discussion of limits to expansion leads Mr. Hamlin to belief that "the exploitation of human and material resources stands in the way of 'rational organization' of production"; but "by allowing the cost of upkeep of the resources employed to take precedence over increased wages and profits the growth of labor and capital can be stabilized." And so he progresses to the view that "copartnership control of corporations is essential to the stabilization of production," but "trustee control of corporations in the United States has been superseded by bloc control" and "bloc control encourages overexpansion and unemployment," affording "inadequate protection to the public, the stockholder and the employee." Conservation of resources and various phases of the tariff are discussed and the Constitution of the United States is considered as "an issue." A chapter also is devoted to the subject: "The Volstead Act or the Constitution?" Some of the other chapters are: "The Sixteenth Amendment Unconstitutional," "Budget Dilemma," "Permanent Quota Basis for Control of Immigration," "Drift Away from Majority Rule" and "Adequate Police Protection in the Field of International Relations."

WANT SECTION

THE CLASSIFICATIONS IN THIS SECTION ARE:

Machinery and Supplies

Under this heading are reported requests for data, prices and literature and information on machinery, supplies and miscellaneous materials of a wide variety.

Items in this department are published without charge and these columns are open for the publication of wants of all kinds relating to construction work, machinery, materials and supplies.

Building Materials and Equipment

This division comprises all classes and kinds of materials and equipment used in building and construction projects of every kind.

Bids Asked

Includes bids asked by U. S. Government, States, districts, municipalities, firms and individuals for machinery, materials, supplies and construction work.

Machinery and Supplies

Boiler.—R. P. Johnson (Mchy. Dealer), Wytheville, Va.—Wants prices and data on 40 or 50 hp. Economic type boiler, not less than 125 lb. steam pressure; complete.

Boiler and Smokestack.—E. C. Selz, Archt., care Massell Realty Co., 61 Poplar St., Atlanta, Ga.—Wants prices and data on 150 h. p. R. T. boiler, 125 lb. working pressure; 80 ft. 36-in. stack.

Broom Making Machinery.—J. S. Gibson, Pres., Carolina State Bank, Gibson, N. C.—Wants prices and data on machinery for manufacture of stick brooms.

Canning Plant Equipment.—Chas. S. Ashbrook, Brooksville, Fla.—Wants prices and data on vegetable and fruit canning plant equipment.

Cement Tile Machine.—M. W. Locke, McBurnett Hotel Co., San Angelo, Tex.—Wants prices and data on machine for making 4, 6, 8, 10 and 12-inch cement drain tile with bell on one end.

Crane.—W. M. Smith & Co., Fort Sumter Hotel Charleston, S. C.—Wants used ship side or gantry crane.

Elevator Hoist.—E. E. Rabalais & Sons, Contrs., Bunkie, La.—Want prices and data on small hoist for elevator.

Engine Lathe.—Mott Core Drilling Co., Ninth St. and Eighth Ave., Huntington, W. Va.—Wants engine lathe, quick change, 18 in. to 24 in. by 30 ft.; must be 20 ft. between centers.

Ice Machinery and Equipment.—Trade Street Coal Co., Inc., W. W. McGee, Pres., Bruce Bldg., Winston-Salem, N. C.—Wants machinery and equipment for manufacture of ice.

Hoist.—Johnson & Hoehler (Machy. Dealers), Second and Railroad Aves., Fernwood, Pa.—Want single drum electric quarry hoist, good for 7000 lb. single line pull at 300 ft. per minute, 3 ph., 60 cycle, 220 volts.

Marine Hardware (Chromium Plated).—Herbst Boat Works, Inc., Wilmington, N. C.—Wants prices and data on chromium plated marine hardware for use on small boats.

Plate Rails.—W. M. Smith & Co., Fort Sumter Hotel, Charleston, S. C.—Wants used set of 28 or 30 ft. plate rails.

Saw Mill.—R. P. Johnson (Mchy. Dealer), Wytheville, Va.—Wants prices and data on short log saw mill, American "Empire" type preferred.

Scales.—Southwestern Seating Co., San Antonio, Tex.—Wants prices and data on health scales for schools.

Sewer Plant Equipment.—City of Dallas, Tex., W. S. Tanner, Ch. Engr., Maj. E. A. Wood, City Plan Engr., plans \$4,000,000 sewer improvements and extensions and will want:

- (1) Aerators
- (2) Clarifiers
- (3) Filters and Filter Plates
- (4) Pumps (Sewage and Sludge)
- (5) Sludge Presses
- (6) Pipe (Vitrified Tile and Concrete).

Wagon Scales.—Trade Street Coal Co., Inc., W. W. McGee, Pres., Bruce Bldg., Winston-Salem, N. C.—Wants pair of wagon scales immediately.

Terrence P. Wynn, 151 W. 66th St., New York City—Wants prices and data on following:

- (1) Cable—2 pieces, 2¼ or 2½ in. diameter, 900 ft. or longer, used
- (2) Hoist—Double drum electric, drum side by side or tandem, large drums
- (3) Shovel—1¼ or 1 yd. gasoline or steam crawler type, used.

L. G. Roberts Co., Box 444, Wellsburg, W. Va.—Wants prices and data on following:

- (1) Bunch Breaking Machines (Hand)—for tobacco
- (2) Cigar Packers
- (3) Scrap Cutters
- (4) Stripping and Booking Machines—and other accessories.

English Construction Co., Inc., 1311 H St., N. W., Washington, D. C.—Wants to correspond with manufacturers in Birmingham district or in South who make steel pipe and who can make large tubular steel radio masts.

Seminole Coal Co., James H. Sibbitt, Sec., P. O. Box 582, Muskogee, Okla.—Wants prices and data on following for developing 700 acres of coal deposits:

- (1) Air Compressor
- (2) Mechanical Loader
- (3) Railroad Track and Equipment
- (4) Steam Shovel
- (5) Tipple—etc.
- (6) Water Pumps.

Miscellaneous.

Electric Door Openers.—Badger Lumber and Supply Co., Columbus, Miss.—Wants prices and data from manufacturers of electric door openers for operating garage doors, gates, etc.

Glass Cases.—C. O. Ball, New Bern, N. C.—Wants prices and data on glass cases for display of peas, beans, etc.

E. G. Kimmiss & Co., P. O. Box 55, Athens, Greece—Wants to represent manufacturers of following: Dental goods, including teeth, materials, chairs and specialties; bacteriological apparatus, including sterilizers, autoclaves, sanitary goods for hospitals and clinics; pharmaceutical supplies, including drugs, remedies, specialties, medicines; disinfecting liquids, for mosquitoes, etc.

Building Material and Equipment.

John W. Cowper Co., Inc., Healey Bldg., Atlanta, Ga., estimating on Sections A, B, C and D of Barracks No. 2, Fort Benning, Ga., bids Dec. 12, and wants prices on materials and sub-contracts.

Henry Norton June, Archt., Nixon Bldg., Corpus Christi, Tex., wants prices on following for \$15,000 dwelling:

- Flooring—hardwood, linoleum, tile
- Plaster Board
- Roofing—asbestos shingle
- Steel Sash
- Tile—interior.

Jos. M. Stanley, 1436 R St., N. W., Washington, D. C., wants prices on slate roofing for \$12,000 dwelling.

Chas. S. Muerl, 3609 Hartford St., St. Louis, Mo., wants prices on following for seven 2-story and basement apartments:

- Cast Stone
- Electric Refrigerators
- Flooring—linoleum, terrazzo
- Roofing—asphalt shingle.

W. W. Johnson, Contr., 301 College St., Springfield, Mo., wants prices on elevators for 2-story and basement store building for J. D. Simmons.

T. H. Campbell & Bros., Middlesboro, Ky., wants prices on following for 3-story store building:

- Elevators
- Flooring—hardwood
- Metal Ceilings
- Roofing (flat)—built-up
- Terra Cotta Trim.

Robt. Harris, Archt., 3432 University Place, Baltimore, Md., wants prices on following for \$18,000 rectory:

- Electric Refrigerators
- Flooring—hardwood, tile
- Limestone
- Roofing—slate
- Steel Sash and Trim.

E. C. Hearon & Sons, Archts., 201½ W. Pine St., Hattiesburg, Miss., want prices on following for \$40,000 public library:

- Flooring—linoleum
- Roofing—tile.

N. F. Drake, 501 Forrest St., Fayetteville, Ark., wants prices on following for \$60,000, 3-story and basement store:

- Brass and Bronze Work
- Elevators—combination passenger and freight

Flooring—maple

Metal Doors

Roofing—built-up

Terra Cotta Trim

Structural Steel.

A. O. Ferebee, Archt., 353 Arcade Bldg., Norfolk, Va., wants prices on following for \$10,000 store for Dr. W. T. Monroe:

- Electric Refrigerators
- Flooring—tile
- Roofing (flat)—built-up.

Brooke B. Burnham, Archt., Age-Herald Bldg., Birmingham, Ala., wants prices on following for \$350,000 office bldg., Ensley, Ala.:

- Electric Refrigerators
- Elevators
- Flooring—hardwood, tile, composition
- Metal Ceilings
- Marble
- Metal Doors
- Terra Cotta Trim
- Vault Lights
- Ventilators
- Wire Glass
- Brass and Bronze Work
- Brass and Bronze Work.

Giesecke & Harris, Archts., 207 W. 7th St., Austin, Tex., wants prices on following for \$75,000 school, Bryan, Tex.:

- Cast Stone
- Flooring—linoleum, terrazzo, composition
- Metal Ceilings
- Ventilators

A. B. Reynolds, 87 Fifteenth St. N. E., Atlanta, Ga., wants prices on following for \$45,000 apartment:

- Cast Stone
- Incinerator
- Limestone
- Metal Ceilings
- Roofing—built-up
- Soundproofing
- Steel Sash and Trim
- Stucco
- Terra Cotta Trim
- Wall Finish and Material

John Tulloch, Archt., Sherman, Tex., wants prices on following for \$71,000 administration building:

- Cast Stone
- Dumb Waiters
- Flooring—hardwood, rubber tile
- Roofing (hip)—slate
- Steel Sash
- Tile—gypsum.

Chas. T. Butler, 208 Gilbert Bldg., Beaumont, Tex., wants prices on following for \$44,000 residence:

- Cast Stone
- Flooring—hardwood
- Tile—interior.

Chas. H. McCauley, Archt.-Engr., Jackson Bldg., Birmingham, Ala., wants prices on following for apartments, Tuscaloosa, Ala.:

- Celotex
- Flooring—oak, linoleum, tile
- Roofing—built-up, slate
- Tile—hollow.

J. P. Annan, Archt., 1015 Slattery Bldg., Shreveport, La., wants prices on following for five 1½-story stores for Leon Johnson:

- Electric Refrigerators
- Flooring—terrazzo, tile
- Incinerator
- Metal Ceilings
- Roofing—built-up, tile
- Tile—hollow
- Ventilators.

Waverly Taylor, Inc., Bldr., 1522 K St., N. W., Washington, D. C., wants prices on following for 9 dwellings:

- Flooring—hardwood
- Metal Doors
- Roofing—slate
- Steel Sash and Trim
- Tile—interior
- Ventilators.

Henry E. Schwarz, Archt., 909 Slattery Bldg., Shreveport, La., wants prices on following for \$18,000 fire station:

- Electric Refrigerators
- Flooring—hardwood, tile
- Limestone
- Marble

Roofing (hip)—slate
Steel Sash and Trim
Tile—hollow
Brass and Bronze Work.

E. C. Seiz, Archt., care Massell Realty Co., 61 Poplar St., Atlanta, Ga., wants prices on following for \$145,000 laundry, boiler house, work shop and garage:

Cast Stone
Flooring—composition
Metal Doors
Roofing—built-up
Sprinklers
Steel Sash and Trim
Tile—hollow
Ventilators
Wire Glass.

Bids Asked

Beds.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids Nov. 26 for furnishing 1500 general service beds, delivery Quantico, Va.

Boring Machine.—Pur. Agt., Post Office Dept., Washington, D. C.—Bids Nov. 26 for connecting rod bearing boring machine.

Bridges.—State of Louisiana—Bids for 2 bridges. See Construction News—Bridges, Culverts, Viaducts.

Bridge Approaches.—Louisville, Ky. See Construction News—Bridges, Culverts, Viaducts.

Bridges.—State of Kentucky—Bids for 2 bridges. See Construction News—Roads, Streets, Paving.

Bridges, etc.—Jacksonville, Fla.—Bids for 3 bridges and 3 culverts. See Construction News—Bridges, Culverts, Viaducts.

Bridges, etc.—Heflin, Ala.—Bids for bridges and culverts. See Construction News—Bridges, Culverts, Viaducts.

Bridges.—Mobile, Ala. See Construction News—Roads, Streets, Paving.

Canal Improvements.—City of Cumberland, Md., Leander Schaldt, Special Flood Engr., 12 Green St.—Bids Nov. 26 for lowering canal dam and installing conc. top with flash boards and for clearing and dredging lower Potomac River territory and raising C. & O. Canal towpath.

Centrifugal Pump.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids Nov. 27 for furnishing centrifugal pump, direct connected, delivery San Francisco, Calif.

Culverts.—A. L. Flint, Gen. Pur. Officer, Panama Canal, Washington, D. C.—Bids Nov. 28 for galvanized corrugated culverts; Sch. 1923.

Dredging.—Virginia—Bids for dredging 2,000,000 cu. yd. of material. See Construction News—Drainage, Dredging and Irrigation.

Dredging.—Virginia—Bids for dredging 3,977,000 cu. yd. of material. See Construction News—Drainage, Dredging and Irrigation.

Dredging, Bulkheading, etc.—City Comm., Jacksonville, Fla.—Bids Dec. 17 for improving McCoy's Creek; work includes bridges across McCoy's Creek at Riverside Ave., Myrtle Ave., Stockton St. and culverts at Leland, Fitzgerald and Smith Sts. and swimming pool, Stockton St.; all bulkheading, dredging, filling, etc.; specifications, etc., from office of Engr.

Heating and Plumbing Equipment.—Comm. Counsel, Shreveport, La.—Bids Nov. 27 for installing plumbing and heating equipment in Municipal building now being erected at Grand Ave. and Reynolds St.; specifications, etc., from Jones, Roessle, Olschner & Weiner, Archts., Ardis Bldg., Shreveport.

Hospital Equipment.—Board of County Commrs., Reynolds Building, Asheville, N. C.—Bids Nov. 26th for operating room equipment, X-ray equipment and laboratory equipment for Buncombe County Health Dept.

Iron, Fence, Hardware, etc.—Contacting Officer, Q. M. Corps, Ft. Bragg, N. C.—Bids Nov. 26 for corrugated galv. iron sheets, ridge roll, lithopone paint, turpentine, linseed oil, white lead, trap hinges, locks, screws, carpet tacks, steel washers, garden gate, gate fence, nails, etc.

Lighting Fixtures.—Supervising Archt., Treasury Dept., Washington, D. C.—Bids Nov. 28 for installing lighting fixtures in U. S. Post Office and Court House, Atlanta, Ga.

Levees.—War Dept. U. S. Engr., New Orleans River Dist., Office of Dist. Engr., River Front and Burdette Sts., New Orleans.—Bids Nov. 30 for constructing approximately 172,000 cu. yd. of earth work in levees designated as follows by number, location, kind of work, estimated net yardage: Lower Tensas Levee Dist.—Winter Quarters Levee Slide (653 R), about 4200 ft. above eramp to Winter Quarters Landing, La., and extending down stream about 660 ft., new loop levee,

crown of existing levee to be cut level, 5800; Botany Bay Levee Slide (654 R), Tensas Parish, about 8 mi. above town of St. Joseph, La., new loop levee, 3400; Fish Pond Levee Wash (728.5 R), Concordia Parish, 1 mi. above Deer Park station, restoring riverside slope of existing levee, 14,000; Helena-Concordia Levee (697 R), Concordia Parish opposite town of Ferriday, removing tile drains from levee, restoring crown, 3200; St. Joseph Levee Slide (663 R), Tensas Parish Levee, 3 1/4 mi. below town of St. Joseph, connect existing levees to form one continuous loop levee and to extend lower end of last loop levee, 10,390; Ashley-Ardee Levee Slide (732 R), Concordia Parish, 3 1/4 mi. below Deer Park, new loop levee and crown of existing levee to be cut level, 1300; Atchafalaya (Front) Levee Dist.—Brusley Levee Wave Wash No. 2 (838 R), West Baton Rouge Parish, at town of Brusley, restoring levee section damaged by wave wash, 11,600; Gassie Levee Wave Wash (840 R), West Baton Rouge Parish at Gassie settlement, restoring levee section damaged by wave wash, 11,000; Live Oak—Reliance Wave Wash (851 R), Iberville Parish at Medora, Live Oak Plantations, restoring levee section damaged by wave wash, 16,500; Pontchartrain Levee Dist.—Union Levee Wave Wash (896 L), St. James Parish, restoring levee section damaged by wave wash 45,500.

Lumber, etc.—Quartermaster, Marine Corps, Washington, D. C.—Bids Nov. 27 for 75,000 ft. b. m. yellow pine lumber and 60 white pine doors.

Metal Work.—Supt. of Lighthouses, Key West, Fla.—Bids Dec. 5 for metal work complete for 4 light towers.

Miscellaneous Supplies.—A. L. Flint, Gen. Pur. Officer, Panama Canal, Washington, D. C.—Bids Nov. 28 for following; Sch. 1921:

Roller nickel steel bearing plates, bushings upper pintle, stud bolts, anti-friction metal, jacking bolts, etc.

Miscellaneous Supplies.—A. L. Flint, Gen. Pur. Officer, Panama Canal, Washington, D. C.—Bids Dec. 7; Sch. 1924:

Motor truck chassis, automobiles, cast steel rollers, bronze bushings, grinders, melting furnaces, sewer pipe, lighting fixtures, transformers, bolts, nails, paint, etc.

Paper.—Director of Purchase and Sales, Dept. of Agriculture, Washington, D. C.—Bids Nov. 27 for 200,000 lbs. of impression paper.

Paving.—Alexandria, La. See Construction News—Roads, Streets, Paving.

Paving.—Covington, La. See Construction News—Roads, Streets, Paving.

Pumps.—Quartermaster, Marine Corps, Washington, D. C.—Bids Nov. 27 for centrifugal pump, for D. C.

Road Building Material.—Louisiana Highway Comsn., Raymond Bldg., Baton Rouge, La.—Bids Nov. 27 for furnishing washed and screened gravel, 40% sand-clay gravel, 50% sand-clay gravel, reef shell, clam shell, limestone, slag and sand in such quantities as may be required for maintenance during Dec., 1928.

Roads.—Orlando, Fla.—Bids for 3 roads. See Construction News—Roads, Streets, Paving.

Roads.—Mobile, Ala.—Bids for 2 roads. See Construction News—Roads, Streets, Paving.

Road.—Greenwood, Miss. See Construction News—Roads, Streets, Paving.

Road.—Galveston, Tex. See Construction News—Roads, Streets, Paving.

Road.—Holly Springs, Miss. See Construction News—Roads, Streets, Paving.

Roads.—State of Kentucky—Bids for 8 roads. See Construction News—Roads, Streets, Paving.

Road Building Materials.—El Paso County Commrs., Court, E. B. McClintock, County Judge, El Paso, Tex. Bids November 27 for lumber, cement, rock, sand and gravel, rebar, steel and corrugated metal pipe.

Roofing.—Copiah County Bd. of Supervisors, Hazlehurst, Miss.—Bids Dec. 5 for re-roofing courthouse; specifications, etc., from Emmett J. Hull, Archt., Merchants and Trust Co. Bldg., Jackson, Miss.

Roofing Slate.—Dist. Commrs., Washington, D. C.—Bids Nov. 30 for 45,000 pieces of roofing slate.

Seating.—Gilchrist County Bd. of Public Instruction, Trenton, Fla.—Bids Dec. 4 on seating of classrooms and auditorium, also teachers' desks for \$45,000 high school, Bell, Fla.

Street.—Hattiesburg, Miss. See Construction News—Roads, Streets, Paving.

Trucks (Auto).—Dist. Commrs., Washington, D. C.—Bids Nov. 28 for 4 auto trucks, dump chassis.

Washed and Screened Gravel, etc.—Louisiana Highway Comn., J. M. Fourmy, Engr., Baton Rouge, La.—Bids Nov. 27 for 40% and 50% sand-clay gravel, reef shell, clam shell, crushed limestone, sag and sand, for maintenance purposes during Dec., 1928.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers, whether they are advertisers, or subscribers, or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

Du Pont Acquires Grasselli.

The shareholders of the Grasselli Chemical Company, Cleveland, Ohio, have ratified the action of the directors authorizing the acquisition of the properties and business of that company by E. I. du Pont de Nemours & Company, Wilmington, Del. The Grasselli Company will transfer its entire properties and business, after which it will be dissolved. The acids and heavy chemical properties and business acquired from the Grasselli Company, together with the acids and heavy chemicals business of the du Pont Company, comprised in its pigments and heavy chemicals division, will be transferred to a new company, the Grasselli Chemical Company. The explosives business will be merged with the du Pont explosives department.

Lift and Ladle Tractors.

The Elwell-Parker Electric Company, Cleveland, Ohio, describes the Crane lift-tractor as a one-man tool that enables the operator to lift 1500 pound loads onto skids and later pick up a skid load of 6000 pounds for transport at three to five miles per hour. Crane loads may be picked up over end of platform

or at 90 degrees to either side. The electric ladle tractor "will pick up the ladle at cupola and transport load 500 feet in three minutes along the most congested floor without spilling or interfering with other workmen, and will pick up the last delivered ladle and return for another batch and repeat the run."

Frederick Kent Copeland.

Frederick Kent Copeland, president of the Sullivan Machinery Company, Chicago, Ill., since 1892, died on November 10 while on a visit to the company's eastern works at Claremont, N. H. Mr. Copeland helped organize the Diamond Prospecting Company in 1884 and became its president; later, it merged with the Sullivan Machine Company, making Diamond Core drills. He was a member of the American Institute of Mining and Metallurgical Engineers, American Society of Mechanical Engineers, New York Engineers' Club and of the Bankers' Club of New York, and was a past president of the Engineers' Club of Chicago, the Western Society of Engineers and the National Metal Trades Association. He had served as a trustee of Massachusetts Institute of Technology.

Cotton Mill for Sale.

Opportunity to enter the cotton textile industry in the South is offered in announcement that the Kinston Cotton Mills at Kinston, N. C., may be purchased on easy terms. The mill has 16,840 spindles and is operated by steam, with production of 40,000 to 45,000 pounds weekly. It is fully equipped to make from 8s to 30s high-grade hosiery and underwear yarns on cones, skeins and tubes, single and two-ply. The mill is situated on the Atlantic Coast Line and Norfolk-Southern railroads, with 61 tenement houses near by, plenty of cotton from the local market and plenty of good labor available. L. J. Mewborne is president.

North Wilkesboro's Advantages.

In telling of the advantages of North Wilkesboro, N. C., as a site for industrial enterprises, Thos. W. Hall of the Spahnour-Sydnor Drygoods Company commends the town to the attention of furniture manufacturers and textile factories. Thousands of acres of forests await the furniture industry and the Southern Power Company furnishes dependable power at reasonable rates for textiles and furniture, while also there is a fine supply of American labor at hand. North Wilkesboro is situated at the junction of the Yadkin and Reddies Rivers and has a water supply of fine analytical test, says Mr. Hall.

Du Pont Personnel Changes.

The du Pont Company, Wilmington, Del., announces that J. J. Moosmann has been appointed assistant general manager of the paint, lacquer and chemicals department, while the chemical products division will be operated as two divisions, with E. M. Flaherty as division manager at Parlin, N. J., in charge of the industrial finishes division, and G. A. Staples as division manager at Detroit in charge of the automotive finishes division.

Industrial Merger Announced.

The United States Sand Paper Company, Williamsport, Pa., announces that it has purchased the assets, good-will, formulae, etc., of the Federal Abrasive Works, Inc., Westfield, Mass., and the Standard Abrasive Company, Inc., Garfield, N. J. The business of these two companies will be consolidated and administered under the name of the Standard Abrasive Company, Inc., with office and factory at Garfield, N. J.

Believers in West Palm Beach.

West Palm Beach and Palm Beach county, Florida, are described in a brochure issued by "The Believers in West Palm Beach" and circulated largely by Alfred H. Wagg, president of the Alfred H. Wagg Organization. The pamphlet contains a series of informative articles, all finely illustrated. Jerome E. Wideman is president of the Believers in West

Palm Beach, Howard W. Selby is vice-president and J. P. Cochrane is secretary-treasurer, the directors being D. H. Conkling, Edward F. Stumpf and Alf R. Nelson.

McClintic-Marshall in Buffalo, N. Y.

Another plant has been added to the list of the McClintic-Marshall Company, steel bridges, buildings, etc., with general offices at Pittsburgh, Pa., the concern having taken over the fabricating plant of the Bethlehem Steel Company at Buffalo, N. Y. Leslie Allen, originally manager of the company's Carnegie plant, will have charge of the Buffalo works. Besides Buffalo, plants are situated at Pottstown, Rankin, Carnegie and Leetsdale, Pa.; Chicago, Ill., and Los Angeles and San Francisco, Cal.

Pennsylvania-Dixie Official.

J. H. Chubb has been appointed manager, service bureau, Pennsylvania-Dixie Cement Corporation, with headquarters in the New York office, 131 East 46th street. Mr. Chubb, a graduate civil engineer, has had over 20 years' experience observing the results obtained with, and advising concerning, the proper use of Portland cement and concrete in all classes of construction work. He is a member of the committee on technical problems, Portland Cement Association, which outlines the tests and activities and reviews publications of the association's research laboratory.

ASPHALT PAVING CONFERENCE IN NEW ORLEANS.

Data on Paving Problems to Be Presented at Sessions Next Month.

The seventh annual asphalt paving conference will be held at the Roosevelt Hotel, New Orleans, La., December 3, 4, 5, 6 and 7, under the auspices of the Asphalt Association of which J. S. Helm is president, and the Association of Asphalt Paving Technologists of which L. M. Law is president. No day sessions have been scheduled for December 3, but registrants are invited to attend a meeting of the south central division of the National Highway Traffic Association, A. H. Blanchard, president, Toledo, O.

At the opening session on December 4 addresses will be made by J. S. Helm; L. M. Law; Huey P. Long, Governor of Louisiana; A. T. O'Keefe, Mayor of New Orleans; O. K. Allen, Chairman, Louisiana Highway Commission; John Klorer, Commissioner Public Property, New Orleans. "The Economics of Asphalt Pavement Construction as Affected by Mechanical Equipment and Operation" will be discussed by T. Warren Allen, Chief, Division of Management, U. S. Bureau of Public Roads; "Economics of Asphalt Pavement Construction as Affected by Materials and Control Methods" is the subject of a paper to be presented by M. H. Ulman, Assistant Engineer of Materials, Pennsylvania State Highway Department.

At the second session on the opening day the following papers will be presented: "The Airplane in American Commerce and Industry," by Col. Harry H. Blee, Chief Airport Section, U. S. Department of Commerce; "Asphalt Construction and Treatment for Airport Runways," by A. H. Blanchard, Consulting Engineer, Toledo, O.; "Soil Investigation and Sub-grade Treatments," by F. H. Eno, Research Professor, Highway Engineering, Ohio State University; "Waterproofing and Stabilizing Sub-grades with Asphalt Treatment," by C. A. Hogentogler, U. S. Bureau of Public Roads; "History of Black Base Pavements in Fresno County, California," by Chris P. Jensen, Surveyor Fresno County, Calif.; "Require-

ments for Asphalt Filler for Brick Pavements," by Harry J. Kirk, Director of Highways, Columbus, O.

Service results from the use of asphalt in state and provincial highway construction will be discussed at the third session by V. R. Burton, Michigan State Highway Department; W. R. Neel, State Highway Engineer, Georgia; V. L. Ostrander, Manager Eastern Branch, the Asphalt Association; R. M. Smith, Deputy Minister of Highways, Ontario, Canada; J. D. Waldrop, Asst. Highway Engineer, North Carolina State Highway Commission; T. C. McEwen, Chief Engineer, J. E. Moreland, State Construction Engineer, and F. W. Webster, State Maintenance Engineer, Tennessee Department of Highways and Public Works; Major J. M. Fourmy, State Highway Engineer, Louisiana.

The following papers will be presented at the fourth session: "Opportunity and Obligation of the Petroleum Industry in Developing the Use of Cut-Back and Other Asphaltic Products for Surface Treatment and Low Cost Roads," by E. W. James, Chief Division of Design, U. S. Bureau of Public Roads; "A Survey of Prevailing Practices in Connection with the Use of Cut-Back Asphalts and Other Surface Treating Materials," by Herbert Spencer, Standard Oil of New Jersey, S. A. Montgomery, Standard Oil of Indiana, and J. N. Byrd, Mexican Petroleum Corp.; "Methods and Trends of Practice in the Use of Soft Asphalt Cements for Surface Treatment," by Major Charles A. Brown, Engineer, Orange County, Florida; "Methods and Trends of Practice in Use of Cut-Back Asphalts and Road Oils for Surface Treatment," by H. G. Nicholson, Minnesota State Highway Department; "The Economics of Conserving Our Investment in Existing Highways," by Professor H. J. Hughes, Dean of Harvard Engineering School.

At the fifth session applied paving research will be discussed as follows: "Research and Practical Experience," by A. W. Dow, Chemical Engineer, New York; "Practical Application of Shear Test," by H. W. Skidmore, President Chicago Paving Laboratory; "Practical Application of Stability Test," by Prevost Hubbard, Chemical Engineer, the Asphalt Association; "Practical Value of Research as Applied to Paving Problems in Pittsburgh," by J. J. Paine, Director of Pittsburgh Bureau of Tests; "Value of Research of the Asphalt Paving Contractor," by Paul M. Wells, Toledo, O.

Because so large a proportion of the streets and highways of this country are paved with asphalt, surface treated with asphaltic material, or involve the use of asphalt as fillers for joints, the papers to be presented by authorities on asphalt construction, maintenance and economics, will, it is believed, produce information of great value in the solution of paving problems.

Public Utilities Topics Considered.

Roanoke, November 21—[Special.]—Closeness of relations between public utilities of various kinds and the people was indicated in the nature of addresses and proceedings at the annual convention of the Public Utilities Association of Virginia, held here at the Hotel Roanoke. Also, a women's session was held for the purpose of organizing the women of the utilities in Virginia into a woman's committee to assist and co-operate in all activities of the Public Utilities Association.

Following invocation by Rev. Alfred R. Berjekey, address of welcome by Mayor Charles D. Fox and response by Floyd W. King, vice-president of the Virginia Public Service Company, Charlottesville, an interesting program was taken up. Among the addresses listed were: "The Relation Between the Public Utility and the Public," Commissioner W. M. Fletcher of the State Corporation Commission; "Investment Banking Views on Utilities," Henry R. Hayes, vice-president of Stone & Webster and Blodget, Inc.; "The State Conservation and Development Commission," Chairman William E. Carson; "Some Problems of Urban Transportation," Vice-President Tom P. Walker, Virginia Electric & Power Company; "Industrial Development in the New Virginia," J. P. Fishburn, president of the Virginia State Chamber of Commerce; "Your City and Your Business," Colvin Brown, United States Chamber of Commerce; "Fundamental Rate Base," N. M. Argabrite, vice-president American Gas and Electric Company, New York; "Extension of Electricity to the Farm," D. H. Barger, Shawsville, Va.

In the course of his address, Mr. Hayes said:

"Stability of investment is one of the prime factors which have permitted the industry to command funds for its ever increasing needs. Without it, we would have lacked the financial means for the expansion which we have already witnessed. None of us here today will doubt for an instant that public utilities are destined for still greater expansion. So, it would seem wise, at a time when the industry happily enjoys prosperity, to improve those conditions which have led to the stability of the business, rather than to consider new theories, or to revert to the discarded practice of public ownership with public operation."

An idea of what a passenger's carfare is expected to do was given thus by Mr. Walker:

"Under the theory established by many years' usage, and at present in vogue, he who actually rides the cars and buses is expected to carry the entire cost of financing and operating our transportation systems. His fare is expected:

"First, to support the families of those who operate and maintain the equipment, to purchase power and necessary supplies, and to satisfy the requirements of those who have ventured their money in the business.

"Second, to supply a well paved street along street car routes (usually the entire traveled portion) for the use of the automobilist.

"Third, to provide liberally through general taxes for the maintenance of the city government.

"Fourth, to maintain public parks or similar municipal ventures which eagerly suggest themselves as proper beneficiaries of gross receipts or other special forms of taxation."

Mr. Brown said that corporations used to think that profits depended on low wages and long hours and gave little thought to the ability of the public to buy and enjoy what they had to sell. Slowly, it has dawned upon them that the purchasing power of the people is what makes for industrial and commercial prosperity, and that low wages and long hours do not necessarily mean high profits for capital, but that the very reverse of this may be true.

North Carolina County to Sell \$781,000 Bonds.

Winston-Salem, N. C.—Bids for Forsyth County bonds totaling \$781,000 will be opened November 28 by the Board of County Commissioners. Of the total \$311,000 will be for schools, \$250,000 for hospitals and \$220,000 for roads.

Roads Chief Scores Toll Bridges and Billboards.

MacDonald Declares Private Interests Obstruct Building of Public Bridges—Calls Roadside Billboards National Disgrace.

Reporting on the year's activities of the Bureau of Public Roads, Thos. H. MacDonald, chief of the bureau, emphasized the functions of the bureau as a research organization operating in behalf of all road building agencies, and also the service of the bureau in co-ordinating the various highway systems including those designated as Federal Aid, State, Forest and Park highways.

The report made public last week by Secretary of Agriculture Jardine summarizes the work of the bureau for the year ending June 30, 1928, and includes detailed reports of work done in each State, of sums expended and results achieved by the highway engineers, and also of the various studies of drainage, irrigation, machinery and farm construction which have gone forward under the Division of Agricultural Engineering.

"During the fiscal year 1928," says Mr. MacDonald, "improvements were completed on 8184 miles of Federal-aid road which had not previously been improved with Federal assistance. Advanced stages of improvement were completed on 2014 miles. At the close of the year initial improvements were in progress on 9494 miles and advanced or stage construction was under way on 1285 miles."

The total cost of the 8184 miles of initial construction and the 2014 miles of stage construction completed was \$205,043,784, of which the Federal Government paid \$88,056,984, or 43 per cent, and the States the balance. The largest disbursements during the year were made to Illinois, Iowa, Kansas, New York, Pennsylvania and Texas. To each of these States the Federal Government paid during the year more than \$3,000,000.

Mr. MacDonald discussed at length the attitude of the bureau in regard to toll bridges. He reiterated the hope that "the use of Federal-aid funds in payment of a part of the cost of important bridges would be continued," and said these funds "offer an avenue of escape from the dilemma which confronts the highway departments of many of the States," which are torn between the desire to erect bridges which must be expensive and the desire to give some improvement to long stretches of roads in rural districts.

"Taking advantage of this hesitation, private promoters have been busy acquiring exclusive franchises to build bridges at commanding locations on the publicly-built highways, and in compensation therefore to levy toll upon the annually increasing number of travellers."

The bureau announces it has reliable information that private interests have sought by various means to obstruct the construction of free or publicly operated toll bridges at commanding locations, and says: "They have sought to enjoin the construction of public bridges in the courts; and they have attempted, and in some cases have succeeded in blocking legislation authorizing the construction of public bridges."

Originally the law prohibited use of Federal funds for roads which serve as immediate approaches to toll bridges. Congress recognized that this might at times be desirable, and authorized Federal appropriations in payment of half the cost of public bridges, the State's portion of which is to be met by bonds repayable from toll collections. This, says Mr. MacDonald, has proved a feasible solution, and such toll bonds command an active market and more favorable terms than those placed by private interests. Public building also assures open competition in construction bidding.

"In consideration of these and other facts," says Mr. MacDonald, "the bureau generally opposes the construction of private toll bridges and favors construction under public

auspices whether or not it is necessary to resort to tolls as a measure of finance. It has recommended against the granting of authority to private interests in numerous cases, when congressional bills have been submitted for its consideration; but in many cases its recommendations have not been followed. The facts in its possession were placed before Congress at its last session; and it is hoped that a careful consideration of these facts will lead that body to extend the legislative support needed and earnestly desired by the highway administrative authorities of the Government and the States in dealing with this difficult problem of major bridge construction."

Mr. MacDonald also comments on the advertising signboards as follows: "Designedly placed where they will receive the utmost attention, they frequently obscure or mar attractive roadside views and so detract from the pleasurable use of the highways. Accustomed as we are to their unwanted presence in ordinary surroundings, to come upon these blatant commercial appeals high on the face of a majestic cliff, marring a mountainside, or completely obscuring a particularly beautiful vista still awakens a sense of their utter incongruity. In practically all cases these roadside advertisements merely repeat in the same form appeals made quite properly through other agencies. Their disfigurement of the landscape is a national disgrace."

Seeking Work for Southern Labor.

In a movement to obtain employment for the South's labor supply, Colonel J. C. Persons, president of the American Traders National Bank, Birmingham, Ala., as chairman of a committee cooperating with civic organizations, is directing the attention of textile executives in other parts of the country to the labor situation in Birmingham. Many women in that area, it is believed, would welcome an opportunity to work in hosiery, knitting and weaving mills and conversely such industries would find an ample supply of the finest kind of American labor for such work among the women of that section. Through openings of this character thousands of men and women who formerly stagnated in mountain and other remote areas have risen to a condition of prosperity, and others seek the same opportunities.

\$300,000 Addition for Raleigh Bank Building.

Raleigh, N. C.—Contract for an 8-story, \$300,000 addition to the Raleigh Banking & Trust Co. building has been awarded to John W. Hudson, Jr., Tarboro. The 3-story building, constructed in 1914, will require no strengthening to support the additional stories. Two high-speed passenger elevators will be installed. Plans were prepared by W. A. Underwood.

Mr. Hudson now has work under way in the city involving the expenditure of over \$1,500,000, including: The Carolina Hotel, a new high school on St. Marys street, an addition to the Sir Walter Hotel, and a new State fair building.

Bids Submitted on \$900,000 Beaumont School.

Beaumont, Tex.—The School Board has recommended acceptance by the City Commission of the following bids for the new \$900,000 high school: General contract, McDaniel Bros., Beaumont, \$617,450; plumbing and heating, Warren Shivers Co., Houston, \$67,002; electrical equipment, Alan T. Cooke & Co., Houston, \$29,659; kitchen equipment, Albert Pick & Co., Chicago, \$10,703. Contract for refrigeration will be awarded later.

Vernon, Tex., Sells \$350,000 Bonds.

Vernon, Tex.—Bonds in the amount of \$350,000 have been sold by the city of Vernon to Garrett & Co. and the J. E. Jarratt Co., both of Dallas. Of the total issue, \$190,000 represents school bonds, \$60,000 waterworks bonds and \$100,000 city hall bonds. The bonds will bear an interest rate of 4½ per cent.

Census of Manufactures, 1927.

According to data collected at the biennial census of manufactures the establishments engaged primarily in the manufacture of cement in 1927 reported products valued at \$293,565,293, a decrease of 2.4 per cent as compared with \$300,895,070 for 1925, the last preceding census year. The total output comprised 173,206,513 barrels of Portland cement, valued at \$287,431,268; 2,123,868 barrels of natural and puzzolan cements, valued at \$3,126,211; and miscellaneous products, such as ground stone and shale, paving dust, asphalt filler, and clinkers, valued at \$3,007,814.

This industry consists in the manufacture of hydraulic cement from rock, usually quarried by the same establishments. The principal product is Portland cement, but small quantities of natural and puzzolan cements are also manufactured. Portland cement is a calcined and ground mixture of limestone, chalk or marl, and clay or shale. Natural cement is an argillaceous limestone, calcined and ground. Puzzolan cement is made by grinding a mixture of furnace slag and slacked lime. The cement industry as constituted for census purposes does not include the manufacture of refractory cement, which is made by establishments classified in the "Clay products (other than pottery) and nonclay refractories" industry.

Of the 161 establishments reporting for 1927, 25 were located in Pennsylvania, 15 in Michigan, 13 in New York, 12 in California, 11 in Ohio, 8 in Kansas, 7 in Alabama, 7 in Texas, 5 each in Illinois, Indiana, Iowa, Missouri and Tennessee, 4 in Washington, 3 each in Colorado, Georgia, Minnesota, Oregon, Utah and West Virginia, 2 each in Maryland, Montana, New Jersey, Oklahoma and Virginia, and one each in Florida, Kentucky, Louisiana, Nebraska, South Dakota and Wisconsin.

The statistics for 1927 and 1925 are summarized in the following table. The figures for 1927 are preliminary and subject to such correction as may be found necessary after further examination of the returns:

| | 1927 | 1925 | Per cent of increase or decrease (—) |
|---------------------------------------------------------------------|---------------|---------------|--------------------------------------|
| Number of establishments..... | 161 | 145 | 11.0 |
| Wage earners (average number)* | 36,292 | 38,437 | — 5.6 |
| Wages† | \$53,219,678 | \$53,911,519 | — 1.3 |
| Cost of materials, supplies, fuel and purchased power, total‡ | \$119,808,989 | \$114,168,969 | 4.9 |
| Materials and supplies§ | \$59,345,728 | ‡ | ... |
| Fuel and power..... | \$60,463,261 | § | ... |
| Products: | | | |
| Total value¶ | \$293,565,293 | \$300,895,070 | — 2.4 |
| Portland cement— | | | |
| Barrels | 173,206,513 | 161,658,901 | 7.1 |
| Value¶ | \$287,431,268 | \$293,964,730 | — 2.2 |
| Natural and puzzolan cements— | | | |
| Barrels | 2,123,868 | 1,729,343 | 22.8 |
| Value¶ | \$3,126,211 | \$2,709,030 | 15.4 |
| Products other than cement, value | \$3,007,814 | \$4,221,310 | —28.7 |
| Value added by manufacture | \$173,756,304 | \$186,726,101 | — 6.9 |
| Horsepower | 1,057,898 | 871,650 | 21.4 |

*Not including salaried employees.

†The amount of manufacturers' profits cannot be calculated from the census figures, for the reason that no data are collected in regard to a number of items of expense, such as interest on investment, rent, depreciation, taxes, insurance and advertising.

‡Not reported separately.

§Includes the cost of non-returnable containers and the net loss on returnable containers.

¶Includes the value of non-returnable containers sold with the product, but not that of returnable containers.

||Value of products less cost of materials, supplies, fuel and purchased power.

Lockwood Greene Engineers, Inc., Spartanburg, S. C., awarded contract to the McBurney Stoker & Equipment Co., Atlanta, for a guyed steel smokestack, boiler and brick setting for the Spartanburg plant of the Yarns Corporation of America.

The Greater Wastes

The Greater Wastes are the wastes of *mind*, not of matter—wastes of mental energy rather than in material things. Fear, doubt, uncertainty, indecision, procrastination are the unlicensed robbers in every mental territory. But the greatest mental waster of them all is *worry*.

These greater wastes *seem* greater in Business because, of all human activities, Business presents the closer, more visual, and more material check-up.

While *Modern* Accountancy is no cure-all for the *lack* of mind—it *is* a stop-cock for these greater mental wastes. Its enlightened perception of the practical meaning of facts and figures—its orderly application of System and Method in Management, the assurance of its Detailed Audit, the guide of its Budget, its light on Costs—and, above all, the security of its Control, are lessening every day the *greater wastes*.

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KALAMAZOO

NEW ORLEANS
JACKSON
DALLAS
FORT WORTH
HOUSTON
SAN ANTONIO
WACO
SAN FRANCISCO
LOS ANGELES
SEATTLE

FINANCIAL NEWS

Bond Issues Proposed

Ark., Berryville—Indebtedness—Carroll County Commrs. Court, Lem Kendall, County Judge, considering bond issue.

Ark., Hoxie—Indebtedness—City plans issuing and selling bonds.

Fla., Gulfport—Town votes Dec. 8 on \$96,000 bonds for waterfront improvements.

Fla., Jacksonville—Vladuct—City Council authorized sale of \$275,000 bonds.

Fla., Lynn Haven—Refunding—City, I. F. Titus, Clk., receives bids about Feb. 1, 1929, for \$75,000 6% bonds.

Fla., New Port Richey—Refunding—City, Wm. C. Pretorius, Clk., receives bids Dec. 4 for \$80,000 bonds.

Fla., Pass-a-Grille—Public Improvement—Town, H. O. Newman, Clk., receives bids Dec. 5 for \$55,000 6% bonds.

Ga., Cochran—Bd. of Education, J. B. Porter, Clk., Blackley County, Cary Consolidated School Dist., receives bids Nov. 28 for \$13,000 bonds.

Ga., Macon—Bibb County, P. H. Watson, Clk., receives bids Jan. 1, 1929, for \$300,000 4½% school bonds. 11-15

Ga., Macon—Road—Bibb County defeated \$500,000 bond issue. 10-18

Ky., Ashland—Sewer—City, H. L. Carroll, Clk., voted \$400,000 bonds. 11-1

Ky., Jenkins—Paving—Town, O. W. Parks, Clk., defeated \$60,000 bond issue. 11-15

La., Baton Rouge—Highway—State, Huey P. Long, Governor, voted \$30,000,000 bonds.

Ky., Marion—Road—Crittenden County, reported, voted \$200,000 bonds.

La., Opelousas—St. Landry Parish School Board, W. B. Prescott, Secy., receives bids Nov. 28 for \$40,000 School Dist. No. 1 bonds; 5¼% \$1,000 denom.

La., West Monroe, Branch Monroe—City votes Dec. 18 on \$100,000 bonds; \$30,000, paving, etc.; \$12,000, drainage; \$15,000, purchase fire fighting equipment; \$10,000, water works; \$33,000, refunding.

Md., Cumberland—City may petition Maryland Legislature for authority to issue \$125,000 bonds for Memorial Hospital and Nurses' Home.

Md., Salisbury—School, Road—Wicomico County defeated \$1,000,000 bond issue; Horace M. Clark, County Roads Engr. 11-1

Miss., Aberdeen—Hospital—Bd. of Aldermen authorized \$50,000 bond issue. 11-15

Miss., Clarksdale—School—City votes Dec. 11 or 18 on \$250,000 bonds.

Miss., Hattiesburg—City soon vote on \$25,000 airport bonds.

Miss., Hazlehurst—City Council receives bids Dec. 4 for \$12,500 athletic field and city hall bonds.

Miss., Winona—Road—Montgomery County votes Dec. 3 on \$150,000 bonds.

Mo., Chillicothe—Hospital—Livingston County defeated \$200,000 bond issue; F. W. Cornue, Clk. County Commrs. 10-11

Mo., Lebanon—Laclede County voted \$25,000 bonds to purchase farm and build home for dependent poor.

N. C., Asheville—Buncombe County Commrs., E. M. Lyda, Chmn., receive bids Dec. 1 for \$3,250,000 \$1000 denom., not to exceed 5½% bonds; \$2,250,000, road and bridge; \$1,000,000, courthouse and jail.

N. C., Charlotte—Mecklenburg Drainage Comm., Mecklenburg County, J. M. Knox, Sec., receives bids Nov. 24 for \$6450 6% McMichael Creek Drainage Dist., Mecklenburg Drainage Dist. No. 11 bonds.

N. C., Greensboro—Anticipation Revenue—Guilford County Commrs. plan selling \$130,000 short term notes for road work.

N. C., Hickory—City Council will sell, within next 2 months, \$400,000 bonds; \$265,000, paving; \$40,000, water; \$35,000, water and sewer fundings; \$35,000, sidewalks; \$25,000, municipal building fundings.

N. C., Salisbury—Drainage—Bd. of Drainage Commrs., Rowan County Drainage Dist. No. 9, Alma White, Sec., receives bids Nov. 26 for \$9860 6% bonds.

N. C., Winston-Salem—Forsyth County Commrs. receive bids Nov. 28 for \$781,000 bonds; \$311,000, school; \$250,000, hospital; \$220,000, road.

Okla., Alva—Road—Woods County, Clay D. Monrow, Clk., defeated bond issue. 9-20

Okla., Hollis—Harmon County Commrs. call election Dec. 11 on \$325,000 road bonds.

Okla., Muskogee—City votes Nov. 27 on \$295,000 bonds; \$195,000, airport; \$100,000, storm sewer; Hugh Dickson, City Engr.

Okla., Muskogee—Muskogee County will sell \$250,000 of \$1,500,000 road issue on Nov. 27; W. H. Pritchett, County Clk.

Okla., Norman—Library—City voted \$25,000 bonds. 11-1

Okla., Purcell—City voted \$35,000 bonds; \$12,500, cemetery maintenance; \$22,500, sewer. 10-18

S. C., Gaffney—Courthouse—Cherokee County Commrs. receive bids Dec. 4 for \$125,000, not to exceed 5% bonds. 11-15

Tex., Alvin—Paving—City, J. Dobert, Sec., plans selling \$30,000 bonds soon.

Tex., Beaumont—City may vote on improvement bonds; \$1,250,000, sewer and paving; \$40,000 for police and electrical equipment.

Tex., Big Spring—Road—Howard County Commrs. Court considering bond election.

Tex., Dayton—City votes Dec. 10 on \$100,000 bonds; \$60,000, water works; \$40,000, sewerage system.

Tex., Decatur—Road—Wise County votes soon on \$150,000 bonds.

Tex., Edinburg—Hidalgo County, Water Control and Improvement Dist. No. 1, voted \$1,500,000 bonds. 10-18

Tex., Fort Worth—City, O. E. Carr, Mgr., plans selling after Jan. 1, 1929, \$1,500,000 street and sewer bonds.

Tex., Kerrville—Road—Kerr County, Lee Wallace, County Judge, considering \$200,000 bond issue.

Tex., Menard—Paving—City votes Dec. 11 on \$50,000 bonds.

Tex., Menard—Road—Menard County receives bids for \$40,000 bonds.

Tex., Sinton—Road—San Patricio County, Aransas Pass Dist., voted \$200,000 bonds. 11-1

Tex., Teague—Water—City considering \$75,000 bond election.

Tex., Uvalde—Water—City voted \$200,000 bonds; \$125,000, purchase water works; \$75,000, extend mains and improve system. 11-1

Tex., Waco—Road—McLennan County Commrs. may call election Dec. 18 on \$4,791,500 bonds.

Tex., Waco—Road—McLennan County may issue \$1,016,000 bonds.

Va., Boydton—City votes Dec. 4 on \$59,000 bonds; \$30,500, water; \$29,000, sewerage.

Va., Princess Anne—Kempsville District of Princess Anne County votes Dec. 18 on \$293,000 bonds for roads. 11-15

Va., South Norfolk, P. O. Norfolk, Sta. Berkley—School—City receives bids Dec. 17 for \$125,000 5% bonds. 11-15

Va., Winchester—City plans voting soon on \$500,000 4½% bonds; \$125,000, sewer; \$150,000, streets; \$129,000, indebtedness and refunding; \$100,000, schools.

W. Va., West Union—Doddridge County, McClellan Road Dist., voted \$100,000 bonds.

Bond Issues Sold

Alabama—Road, Bridge—State, W. B. Allgood, Treas., Montgomery, sold \$7,500,000 4¼% bonds to First National Bank, Montgomery, at \$154,500 premium and accrued interest; Bibb Graves, Governor. 10-25

Ark., Dardanelle—School—Yell County sold \$12,000 6% bonds to J. S. Langlands, Little Rock.

Fla., Bartow—Polk County sold \$65,000 6% Special Tax School Dist. No. 2 bonds to Brown-Crummer Co., Orlando, Fla., and Wichita, Kansas, at 104.15.

Fla., Fort Lauderdale—Broward County sold \$126,000 6% \$1000 denom. refund bonds to Title Guarantee and Trust Co., Wichita, Kansas.

Fla., Stuart—Refund—City sold \$83,000 bonds to J. H. Durrance Co., West Palm Beach, 95.

Ga., Atlanta—City, B. Graham West, City Comptroller, sold \$2,150,000 4½% bonds to Robinson-Humphrey Co., Atlanta, represent-

ing national syndicate of investment bankers, at \$2,231,141; \$1,500,000, school; \$500,000, sewer; \$150,000, water works. 10-25

Ky., Louisville—Refunding—Sinking Fund Commrs. sold \$1,215,000 4½% bonds to E. W. Hays & Co., Louisville, \$113.50 premium.

La., Denham Springs—School—J. W. Bolton, Alexandria, purchased \$75,000 bonds.

Miss., Biloxi—School—Lyle Bonding Co., St. Louis, Mo., purchased \$100,000 5% bonds.

Miss., Canton—Madison County sold \$30,000 5% improvement bonds to Whitney-Central Trust Co., New Orleans, at 101.33.

Miss., Laurel—Jones County sold \$24,000 refund 4¼% bonds at par to Rogers, Green & Jones.

Miss., Macon—Noxubee County sold \$10,000 5¼% water works bonds to Bank of Brookville, Brookville, at par.

Mo., Jefferson City—City, H. A. Nall, Clk., sold \$100,000 bonds to Caldwell & Co. for par and \$2000 premium.

N. C., Durham—City sold \$500,000 notes to Bankers Securities Corp., Durham.

N. C., Greensboro—School—American National Bank and Trust Co., Greensboro, purchased \$500,000 5¼% anticipation notes.

N. C., Greensboro—Guilford County sold \$175,000 6% notes to American National Bank & Trust Co., \$25 premium.

N. C., Statesville—City, L. N. Mills, Clk., sold \$195,000 sewer, light and fire alarm bonds.

Okla., Hinton—Caddo County sold \$30,000 city hall and sewer bonds to Piersol Bond Co., Oklahoma City, at par. 8-2

Okla., Tulsa—Park—City Sinking Fund purchased \$200,000 of \$400,000 bonds. 11-15

Tenn., Dresden—Sewer—Little, Wooten & Co., Jackson, purchased \$33,000 5% bonds.

Tenn., Nashville—Sewer—City, S. H. McKay, Clk., sold \$400,000 4½% bonds to Bankers Trust Co., Knoxville, 102.472. 10-25

Tenn., Nashville—State Funding Board sold \$2,000,000 short term notes on 5.3% basis to Caldwell & Co.

W. Va., Charleston—Highway—State, Howard M. Gore, Governor, sold \$500,000 4 and 4½% bonds jointly to C. T. Williams & Co., Baltimore, Md., and Estabrook & Co., New York, at \$500,001.

New Financial Corporations

Ala., Birmingham—City Bank and Trust Co., opened; J. B. Lassiter, Pres., 300 Thirteenth Ave. 11-15

Md., Baltimore—F. H. Smith Co. of Maryland, Inc., Calvert Bldg., chartered; Huntington Cairns.

Md., Baltimore—Maryland Finance Co., Inc., 3505 E. Baltimore St., capital \$50,000, chartered; Philbert Artigiani, Joseph Patti, Jr.

Md., Baltimore—National Mortgage and Finance Co., 117 W. Franklin St., capital \$10,000, preferred, and 4000 shares common stock, no par value, incorporated; Charles B. Reed.

Md., Baltimore—Atlantic Securities Corp., 125 E. Baltimore St., capital \$100,000, chartered; George W. Phifer.

Md., Baltimore—Minnesota Co., Calvert Bldg., capital \$1,000,000, incorporated; Huntington Cairns; deal in securities.

Mo., Monett—Monett State Bank and Trust Co., capital \$50,000, chartered; formerly Monett State Bank, F. M. Shriver, Pres.

N. C., Raleigh—Raleigh Securities Co., capital \$100,000, chartered; Oscar Leach, Citizens Bk. Bldg.

N. C., Wilmington—Frank M. Ross, 109 N. Water St., organizing Morris Plan Bank with \$100,000 capital; will open in Jan., 1929.

S. C., Columbia—Peoples' Bank of Columbia, 1200 block Main St., capital \$100,000, opened; John P. Thomas, Jr., Pres.; affiliated with First National Bank of Charleston.

Tenn., Bristol—Small Loan & Trust Co. organized; W. A. Huddleston, Pres.; Ralph Y. Overman, V.-P.; Joe K. Brown, Sec.

American Safe Deposit Co., Inc., New Orleans, La., increased capital to \$1,500,000; John Legier, Pres.; Ernest A. Carrere, Secy.

Exchange National Bank, H. H. Rogers, Pres., Exchange Trust Co., R. M. McFarlin, Chmn. of Bd., associated with group of national banking interests of Tulsa, Okla., com-

(Continued on page 100)

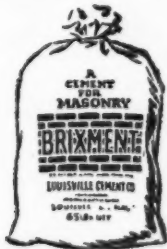
try it yourself

Of course you are interested in knowing that you can buy BRIXMENT for less than portland cement and lime. But your *real saving* will come from the smooth, easy-working quality of the mortar and the fact that, when the mason throws up a head joint, the mortar sticks to the brick!

One part BRIXMENT;
three parts sand. No
lime. No portland. Ready
to mix and use at once.

LOUISVILLE CEMENT CO., Incorporated
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Mills: Brixment, N. Y. and Speed, Ind.

DISTRICT SALES OFFICES
1610 Builders Building, Chicago
602 Murphy Building, Detroit
1015 Chestnut Street, Philadelphia
301 Rose Building, Cleveland



BRIXMENT

for Masonry and Stucco

FINANCIAL NEWS

(Continued from page 98)

pleted plans for organization of National Investors Corporation, with initial capital \$20,000,000; Directors include: Robert O. Lord, Pres., Guardian Detroit Bank; Walter S. Bucklin, Pres., National Shawmut Bank, Boston, Mass.

Greene County Building & Loan Assn., Springfield, Mo., increased capital \$15,000,000 to \$20,000,000.

H. L. and Leo Berg and J. H. Meek purchased Camden Bank & Trust Co., Camden, Ark.; reported, Camden Bank & Trust Co. will consolidate with First National Bank, Jan. 1, 1929; H. L. Berg, probable Pres. of Camden Bank until consolidation.

First National Bank, W. T. Waggoner, Pres., acquired City National Bank, S. A. Lillard, Pres., both Decatur, Tex.

First State Bank, Chas. Isted, Pres., Eustis, Fla., absorbed Bank of Umatilla, G. V. De Vauls, Pres., Umatilla, Fla.

New England National Bank and Trust Co., J. F. Downing, Chmn. of Bd., Fidelity Savings Trust Co., Fidelity National Co., and Fidelity National Bank and Trust Co., H. C. Flower, Chmn. of Bd., all Kansas City, Mo., merged as Fidelity National Bank and Trust Co., Ninth and Walnut, with combined capital, \$5,700,000; Lester W. Hall, Pres.; H. C. Flower, Chmn. of Bd.; J. F. Downing, Chmn. Executive Committee.

American National Bank and American Trust Co., Oliver J. Sands, Pres. of both, Richmond, Va., will consolidate Jan. 2, 1929.

Flood Control Plans Discussed.

Memphis, Tenn., November 17—[Special.]—Constructive discussion by the Mississippi River Flood Control Association at its session here centered in great measure on two points: (1) Whether the United States Government will pay full damages to the areas taken for diversions and floodways, and (2) a demand that the backwater areas of tributary streams be placed on the same footing with the areas of the main river. As interpreted by Senator Ransdell of Louisiana, the intent of the Flood Control law is to compensate landowners for damages arising from the construction of floodways, and in this view Senator McKellar of Tennessee concurred.

While describing the Flood Control measure as "the greatest piece of constructive legislation ever enacted," Senator Ransdell urged that work on the proposed floodways be delayed until all ascertainable facts could be collected as to the efficacy of reservoirs along the tributaries. He added that he would insist that the surveys of the Mississippi tributaries be made, as provided in the law, to ascertain whether reservoirs can be constructed for flood control on those rivers, with a resultant effect on floods of the lower river. It may be shown, said Senator Ransdell, that reservoirs will make largely unnecessary "the enormously expensive floodways."

While amendments to the law were regarded as almost inevitable, it was felt that it may be best to mark time for the present, before framing and asking for such changes.

Cotton Deliveries at Southern Points.

Southern deliveries of cotton at five points, in addition to the present delivery at New York were authorized by the New York Cotton Exchange at a recent meeting, the points specified being Norfolk, Charleston, S. C.; Galveston, Houston or New Orleans. This will necessitate a new contract, making deliveries permissible at seller's option, and the board of managers is to determine when the new contract shall become operative. Precautions have been taken to safeguard trading

and to prevent possible artificial influencing of prices through misuse of the six delivery points.

In the opinion of Gardiner H. Miller, president of the New York Exchange, the action in voting for Southern deliveries was one of the most constructive steps ever taken by the Exchange. For years, this question has been agitated, but until the other day the differences of views had not been reconcilable.

Details Completed for Roxana Oil Refinery at Houston—Contracts Awarded for \$15,000,000 Pipe Line.

Houston, Tex.—Details have been completed by the Roxana Petroleum Corp., St. Louis, for the construction of a refinery and terminals on the Houston Ship Channel and it is understood that the company has awarded a contract to the United Iron Works, Kansas City, Mo., for 4000 tons of steel for the project. Final arrangements for beginning construction are being made by J. H. Dubendorff, construction superintendent, with the expectation that preliminary work will be under way within a few weeks. The site of the refinery and terminals covers an area of 640 acres between the new La Porte road and the Ship Channel, fronting 3000 feet on the former and 2500 feet on the latter. The channel frontage will provide berthing space for 5 average sized tankers.

It is announced that more than 200 miles of preliminary survey of the 450-mile pipe line to be constructed by the Shell Pipe Line Co., a subsidiary of the Roxana Petroleum Corp., from McCamey, Tex., to the proposed refinery, will be made by airplane. Aerial photographs will be taken of the terrain and will be made into a mosaic map for the use of ground engineers. Contracts are said to have been awarded to the Youngstown Sheet & Tube Co., Youngstown, Ohio, for 45,000 tons of pipe for a 10-inch line and to the National Tube Co., Pittsburgh, Pa., for a smaller tonnage. Contract for approximately 70 miles of pipe for the line is yet to be awarded. The cost of the pipe line project is estimated at \$15,000,000.

THE OSCAR T. SMITH & SON CO.

Manufacturing

BANK AND COMMERCIAL STATIONERS

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CHARACTER

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MANUFACTURING

Bank and Commercial Stationers

BALTIMORE, MD.

THE growth and development of the South and Southwest demands extensive financing and banking facilities. If you are interested in enlarging your contacts there, may we discuss our advertising service with you?

MANUFACTURERS RECORD

WE extend the facilities of our organization to those desiring information or reports on companies with which we are identified.

Electric Bond and Share Company

(Incorporated in 1905)

Paid-up Capital and Surplus, \$135,000,000

Two Rector Street

New York

HELPFULNESS

is the motto of this Bank.

Let us tell you about it.

BALTIMORE COMMERCIAL BANK

GWYNN CROWTHER, President

26 South Street, Baltimore, Md.

Capital and Surplus \$1,350,000.00 Member Federal Reserve System

Southern Funds for Southern Progress

Organized, officered, directed by Southern men who are familiar with the economic problems peculiar to the Southern states, this institution is prepared to render a distinctive financing service to responsible Southern firms and business enterprises.

Inquiries Are Invited

Write to

GENERAL SECURITIES CORPORATION

INVESTMENT BANKERS
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New York Office: 535 Fifth Avenue

YOUR BUSINESS SOLICITED

Particular attention given to financing
SOUTHERN PROPERTIES



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Real Estate Loans
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High Grade Bonds

THE CENTURY TRUST COMPANY of Baltimore

Capital \$1,000,000

Surplus \$1,700,000

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R. S. DICKSON & CO.,
New York Greenville, S. C. Gastonia, N. C. Goldsboro, N. C.

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ATLANTA, GA.

*We Underwrite MUNICIPAL BONDS in States of
GEORGIA and SOUTH CAROLINA*

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COMMERCIAL PAPER
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We Buy Bonds

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THE PROVIDENT SAVINGS BANK & TRUST CO.
CINCINNATI OHIO

BONDS AND NOTES

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SEASONGOOD & MAYER

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Municipalities
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Financed

MARX & CO. BIRMINGHAM
ALABAMA

\$25,000,000 From Florida's Fisheries—State Has Only Sponge Fishery in the Country.

According to the Palm Beach Times, Florida's commercial fisheries have shown a steady growth during the past 20 years and today they yield an annual revenue of more than \$25,000,000. The fishery industry of the state in its steady growth has found a ready market for its output at prices which assure success to pioneers in the industry.

Louis Radcliffe, deputy commissioner of the United States Bureau of Fisheries, believes that if Florida fishermen can continue to meet the growing demand for food fish by steadily introducing species previously unused, the strain on older fisheries in the North need not become so great as to actually endanger their existence. "Certain fishes," said he, "such as the creveles, the lady fish and others may still be marketed in somewhat larger quantities. If this be true, with the present rapidly growing demands for fish for food, coupled with vastly improved merchandising practices, we may expect the strain on the present fisheries of importance to reach an extent where curtailment in the catch will become necessary."

In addition to furnishing an ever-growing supply of shrimp, oysters, clams and spiny lobsters, Florida has the only sponge fishery in the United States. The sponge grounds may be divided into two widely separated areas—the "Bay Grounds," lying in the open waters of the Gulf of Mexico from Johns Pass to St. Marks, and the "Key Grounds," extending along and among the reefs and keys from Florida to Boca Grande Key. The Bay Grounds, supplying the bulk of the catch and covering in excess of 5000 square miles, lie almost wholly outside the three-mile limit and are subject to indirect federal regulations governing the size of catch as landed at an American port. The Key Grounds lie within the territorial limits and are under state control.

In 1926 canned fish products were produced to the value of

more than \$870,000 and included oysters, shrimp and hard clams and clam products.

Fish by-products were produced in 1926 to the value of \$300,000 and included shark products—hides for tanning into leather; oil and fins; poultry grit and lime from oyster shells, and fish scrap and oil from menhaden.

Cooperative Milk-Marketing Studies.

To assist officers and managers of cooperative associations in solving their problems of membership relations, the division of cooperative marketing, Department of Agriculture, has undertaken a series of studies, each of which includes members of associations belonging to a single commodity group or to closely related groups. For study, the areas of four cooperative milk-marketing associations were selected, the result showing that more than half of the members of these associations expressed expectations of better prices as a result of cooperative organization, and about one-fourth expressed expectations of better marketing conditions. More than half the members believe that their organization has accomplished what they expected of it.

Copies of Circular No. 41, "Membership Relations of Cooperative Associations (Fluid Milk)," may be obtained from the Department of Agriculture, Washington, D. C.

\$350,000 Building for Ensley, Ala.

Ensley, Ala.—The Ensley Holding Co., Birmingham, will have plans ready by November 28 for bids on the superstructure of a 10-story office building to be erected here at a cost of about \$350,000, after plans by Brooke B. Burnham, architect, Birmingham. W. C. Spiker and E. W. Brunnell are the engineers.



PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS



Bids close December 17, 1928.

TREASURY DEPARTMENT, office of the Supervising Architect, Washington, D. C., November 12, 1928.—SEALED BIDS will be opened in this office at 3 P. M. December 17, 1928, for extension and remodeling of the U. S. Postoffice at Paris, Tenn. Drawings and specifications, not exceeding six sets, may be obtained at this office, in the discretion of the Supervising Architect, by any satisfactory general contractor and provided a deposit is made of \$15 for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. JAS. A. WETMORE, Acting Supervising Architect.

Bids close November 28, 1928.

Sealed Bids, indorsed "Bids for Turbo-Generator, Specification No. 5629," will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 o'clock A. M. November 28, 1928, and then and there publicly opened, for 1000 kw. direct current turbo-generator, surface condenser, motor-driven and turbo-driven circulating pumps, strainer, motor-driven condensate pump, air ejector and switchboard with electrical apparatus at the Naval Academy, Annapolis, Md. Deposit of a check or postal money order for \$5, payable to the Chief of the Bureau of Yards and Docks, is required as security for the safe return of the specification. L. E. Gregory, Chief of Bureau, October 9, 1928.

GENERAL INFORMATION

About Proposal Advertising in Manufacturers Record

PUBLICATION DAY: Thursday.

FORMS CLOSE: 10 A. M. Tuesday.

When too late to send copy by regular mail to reach us by 10 A. M. Tuesday, forward by night letter or air mail when possible.

THE DAILY BULLETIN OF THE MANUFACTURERS RECORD:

Published every business day gives information about the industrial, commercial and financial activities of the South and Southwest.

The Daily Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened or when daily insertions are necessary to meet legal requirements.

The rate is the same for both publications—35 cents a line each insertion.

Bids close November 28, 1928.

U. S. Engineer Office, 300 Custom House, Baltimore, Md. Sealed proposals will be received here until 2 P. M. November 28, 1928, and then opened, for dredging approximately 91,600 cubic yards of material in Wicomico River, Md. Further information on application.

Bids close January 2, 1929.

TREASURY DEPARTMENT, office of the Supervising Architect, Washington, D. C., November 19, 1928.—SEALED BIDS will be opened in this office at 3 P. M. January 2, 1929, for the construction (except elevators) of the Internal Revenue Building (building, Bureau of Internal Revenue) at Washington, D. C. The building as designed will be approximately 185,000 square feet ground area; seven stories and basement; fireproof construction; stone facing. Not exceeding six sets of drawings and specifications will be furnished to prospective bidders upon application therefor, when such application is accompanied by a deposit of \$100 for each set to insure its return. Checks should be drawn to the order of the Treasurer of the United States. All prospective bidders are hereby notified that any bid submitted in response to this advertisement must be accompanied by a statement of facts in detail of the business and technical organization of the bidder available for the contemplated work, including financial resources for such part of the work as is not provided for by the stipulation in Article 16 of the Standard Government Form of Construction Contract to be used and building experience. The United States expressly reserves the right to reject any bid in which the facts as to business and technical organization, financial resources or building experiences, compared with the project bid upon, justify such rejection. The successful bidder will be required to furnish a performance bond of 50% of the contract price, but in no case less than \$3,000,000. JAS. A. WETMORE, Acting Supervising Architect.

Bids close December 4, 1928.

\$80,000 6% Refunding Bonds

New Port Richey, Fla.

Dated October 1, 1928, maturing October 1, 1948, interest 6%, payable semi-annually on April 1st and October 1st of each year, subject to approving opinion of Storey, Thorndike, Palmer & Dodge of Boston, Massachusetts. Interest and maturity payable at the Chase National Bank in New York, N. Y., or at the First State Bank of New Port Richey, New Port Richey, Florida, at the option of the holder.

The population of New Port Richey (approximately 2000) is composed of 80% Northern people, who have brought progressive ideas to the development of this ideally located community, as evidenced by the vote in the recent election, which was 80% for Hoover and the Republican State ticket.

There has never been any default or delay in the payment of any obligation by the CITY OF NEW PORT RICHEY, FLORIDA; it has paid promptly, when due, all interest and maturities, and the issuance of these refunding bonds is in strict compliance with the Charter of said city. Full financial statement furnished upon request.

New Port Richey, situated in Pasco County, Florida, about 35 miles north of Tampa, is a City of Homes—many men of national prominence having permanent residences here.

Sealed bids on the above-described bonds are invited and all bids will be opened on the 4th DAY OF DECEMBER, 1928,

at 8 o'clock P. M. at the City Hall in the said city. The city reserves the right to reject any and all bids. Address bids and communications to

WM. C. PRETORIUS,
City Clerk.

Bids close December 1, 1928.

Viaduct

Jacksonville, Fla.

Bids will be received until noon December 1, 1928, at the office of the President-General Manager of the Jacksonville Terminal Company at Jacksonville, Florida, for the construction of a viaduct crossing railroad tracks of that company on Beaver Street, Jacksonville, Florida. All details and information may be obtained by inquiry to the undersigned.

J. L. WILKES, President,
Jacksonville Terminal Company.

Bids close December 17, 1928.

McCoys Creek Improvement

Jacksonville, Fla.

Sealed proposals will be received by the City Commission of the City of Jacksonville until 8 P. M. on Monday, December 17, 1928, for furnishing all materials and doing all work in improving McCoys Creek as outlined below. All work and materials shall be in accordance with plans and specifications therefor on file in the office of the Engineer, and such plans and specifications and further information may be obtained from the office of the Engineer, Room 1, 228 Hogan Street. A certified check on any National Bank in the sum of \$1000 for Item 1 and of \$6000 for Item 2, made payable to M. B. Herlong, Chairman, must accompany each bid as a guarantee that the bidder will, if awarded the contract, promptly enter into agreement to do the work and furnish the required bond. Each bid should be addressed to the City Commission, marked on the outside "McCoys Creek Improvement," and delivered through mail or otherwise at the office of the Secretary, Room 13, City Hall. The Commission reserves the right to reject any or all bids, or to change the quantities from those in the specifications, as the best interest of the city requires. The printed instructions to bidders and general stipulations included in the specifications must be strictly complied with, and said specifications shall be considered as a part of this advertisement. Plans and specifications can be seen at the office of the Engineer and can be obtained for \$10 per full set for each item. Bids will be received for all of Item 1 or of Item 2 or for both combined.

ITEM 1—Includes bridges across McCoys Creek at Riverside Avenue, at Myrtle Avenue, at Stockton Street and culverts at Leland, Fitzgerald and at Smith Streets, and Swimming Pool at Stockton Street.

ITEM 2—Includes all bulkheading, dredging, filling and other work as itemized in the specifications for the improvement of McCoys Creek.

M. B. HERLONG,
Chairman.

Attest:
M. W. BISHOP,
Secretary.

Bids close December 11, 1928.

Storm Sewers and Paving

Mobile, Ala.

Sealed bids will be received by the Board of Commissioners, City of Mobile, Alabama, until noon Tuesday, December 11, 1928, for the following:

STORM SEWERS

Separate bids on each division for furnishing and installing.

DIVISION 1:

| | |
|---------------------------------------|-----------|
| 6 inch Pipe | 5,650 Ft. |
| 10 inch Pipe | 3,320 Ft. |
| 12 inch Pipe | 4,715 Ft. |
| 15 inch Pipe | 2,180 Ft. |
| 18 inch Pipe | 1,600 Ft. |
| 24 inch Pipe | 1,020 Ft. |
| 3 feet x 6 feet Concrete Culvert .. | 250 Ft. |
| 3.5 feet x 6 feet Concrete Culvert .. | 895 Ft. |
| 4.0 feet x 6 feet Concrete Culvert .. | 50 Ft. |
| Manholes | 35 |
| Inlets | 139 |
| Special Basins | 14 |

DIVISION 2:

| | |
|---------------------------------------|------------|
| 6 inch Pipe | 20,350 Ft. |
| 10 inch Pipe | 18,250 Ft. |
| 12 inch Pipe | 13,805 Ft. |
| 15 inch Pipe | 12,655 Ft. |
| 18 inch Pipe | 6,745 Ft. |
| 21 inch Pipe | 2,200 Ft. |
| 24 inch Pipe | 4,015 Ft. |
| 27 inch Pipe | 880 Ft. |
| 30 inch Pipe | 2,010 Ft. |
| 2 feet x 4 feet Concrete Culvert .. | 960 Ft. |
| 2 feet x 5 feet Concrete Culvert .. | 2,180 Ft. |
| 2.5 feet x 6 feet Concrete Culvert .. | 1,200 Ft. |
| 3 feet x 6 feet Concrete Culvert .. | 430 Ft. |
| 3.5 feet x 5 feet Concrete Culvert .. | 510 Ft. |
| 3.5 feet x 6 feet Concrete Culvert .. | 750 Ft. |
| Manholes | 132 |
| Inlets | 599 |
| Special Basins | 188 |

DIVISION 3:

| | |
|---------------------------------------|------------|
| 6 inch Pipe | 16,860 Ft. |
| 10 inch Pipe | 15,850 Ft. |
| 12 inch Pipe | 13,760 Ft. |
| 15 inch Pipe | 4,300 Ft. |
| 18 inch Pipe | 4,720 Ft. |
| 21 inch Pipe | 800 Ft. |
| 24 inch Pipe | 2,835 Ft. |
| 27 inch Pipe | 800 Ft. |
| 30 inch Pipe | 400 Ft. |
| 2.5 feet x 4 feet Concrete Culvert .. | 400 Ft. |
| 3 feet x 3 feet Concrete Culvert .. | 1,600 Ft. |
| 3.5 feet x 4 feet Concrete Culvert .. | 400 Ft. |
| 3 feet x 5 feet Concrete Culvert .. | 709 Ft. |
| 3 feet x 6 feet Concrete Culvert .. | 1,120 Ft. |
| Manholes | 92 |
| Inlets | 451 |
| Special Basins | 19 |

DIVISION 4:

| | |
|---------------------------------------|------------|
| 6 inch Pipe | 15,150 Ft. |
| 10 inch Pipe | 8,730 Ft. |
| 12 inch Pipe | 8,980 Ft. |
| 15 inch Pipe | 6,470 Ft. |
| 18 inch Pipe | 7,600 Ft. |
| 21 inch Pipe | 1,420 Ft. |
| 24 inch Pipe | 5,520 Ft. |
| 30 inch Pipe | 670 Ft. |
| 36 inch Pipe | 920 Ft. |
| 2 feet x 4 feet Concrete Culvert .. | 1,640 Ft. |
| 2.5 feet x 4 feet Concrete Culvert .. | 1,020 Ft. |
| 3 feet x 4 feet Concrete Culvert .. | 610 Ft. |
| 3 feet x 5 feet Concrete Culvert .. | 1,920 Ft. |
| 4 feet x 5 feet Concrete Culvert .. | 60 Ft. |
| 4 feet x 6 feet Concrete Culvert .. | 100 Ft. |
| 6 inch Culvert Top, 7 feet Span .. | 1,800 Ft. |
| 8 inch Culvert Top, 7.33 feet Span .. | 60 Ft. |
| Manholes | 109 |
| Inlets | 380 |
| Special Basins | 170 |

PAVING**6 INCH ONE COURSE CONCRETE****PAVING:**

| | |
|------------------------|------------------|
| Paving | 165,690 Sq. Yds. |
| Concrete Curbing | 108,255 Lin. Ft. |
| Excavation | 46,191 Cu. Yds. |

VITRIFIED BRICK PAVING:

| | |
|----------------------------------------------|-----------------|
| Paving, including 5 inch Concrete Base | 15,400 Sq. Yds. |
| Concrete Gutters and Driveways | 1,510 Sq. Yds. |
| Concrete Curbing | 9,480 Lin. Ft. |
| Excavation | 4,549 Cu. Yds. |

Alabama Rock, 2 inch top; Kentucky Rock, 1½ inch top; Sheet Asphalt, 1½ inch top, 1½ inch binder; Warrenite Bitulithic, 2 inch top (in competition)

| | |
|----------------------------------------------|------------------|
| Paving, including 5 inch Concrete Base | 219,130 Sq. Yds. |
| Concrete Curbing | 133,380 Lin. Ft. |

| | |
|--------------------------------------|-----------------|
| Concrete Gutters and Driveways | 28,880 Sq. Yds. |
| Excavation | 61,919 Cu. Yds. |

Resurfacing with Alabama Rock, Kentucky Rock, Sheet Asphalt or Warrenite Bitulithic (in competition)

| | |
|-----------------------------------------------------------------------------------------------------|-----------------|
| Royal St., St. Louis to Beauregard, and Joachim St., Church to St. Louis Top Surface, 1½ inches.... | 14,444 Sq. Yds. |
| Black Base | 835 Tons |

Resurfacing with Alabama Rock, Kentucky Rock, Sheet Asphalt or Warrenite Bitulithic (in competition)

| | |
|----------------------------------------------------------------------------------------------------|----------------|
| Beauregard St., Royal to St. Joseph 2 inch Top Surface, except Kentucky Rock 1½ inch Surface | 2,950 Sq. Yds. |
|----------------------------------------------------------------------------------------------------|----------------|

Resurfacing with Alabama Rock, Kentucky Rock, Sheet Asphalt or Warrenite Bitulithic (in competition)

| | |
|---------------------------------------------------------------------------------------------|-----------------|
| Michigan Ave., Government to Illinois 2 inch Top Surface, except Kentucky Rock, 1½ inch.... | 17,250 Sq. Yds. |
| 5 inch Concrete Base..... | 1,150 Sq. Yds. |

| | |
|------------------|------------|
| Black Base | 2,160 Tons |
|------------------|------------|

Widening and Resurfacing with Alabama Rock, Kentucky Rock, Sheet Asphalt or Warrenite Bitulithic (in competition)

| | |
|------------------------------------------------------------------------------------|-----------------|
| Government St., Broad to Ann 2 inch Top Surface, except Kentucky Rock, 1½ inch.... | 28,100 Sq. Yds. |
| 5 inch Concrete Base..... | 5,300 Sq. Yds. |

| | |
|--------------------------------------|----------------|
| Concrete Gutters and Driveways | 1,370 Sq. Yds. |
| Concrete Curbing | 8,360 Lin. Ft. |

| | |
|-------------------------|----------|
| Black Base | 750 Tons |
| Catch Basins Reset..... | 30 |
| New Catch Basins..... | 20 |

Widening and Resurfacing with Alabama Rock, Kentucky Rock, Sheet Asphalt or Warrenite Bitulithic (in competition)

| | |
|----------------------------------------------------------------------------------------|-----------------|
| Government St., Ann to Weinacker 2 inch Top Surface, except Kentucky Rock, 1½ inch.... | 32,540 Sq. Yds. |
| 5 inch Concrete Base..... | 3,909 Sq. Yds. |

| | |
|--------------------------------------|----------------|
| Concrete Gutters and Driveways | 1,436 Sq. Yds. |
| Resetting Granite Curbing.... | 4,000 Lin. Ft. |

| | |
|------------------------|----------------|
| Concrete Curbing | 5,600 Lin. Ft. |
| Black Base | 3,000 Tons |

| | |
|-------------------------|----|
| Catch Basins Reset..... | 40 |
| New Catch Basins..... | 20 |

Widening and Resurfacing with Alabama Rock, 2 inch top; Kentucky Rock, 1½ inch top; Sheet Asphalt, 1½ inch top, 1½ inch binder, or Warrenite Bitulithic, 2 inch top (in competition)

| | |
|-----------------------------------------------------|----------------|
| Springhill Ave., Dauphin to Bayou Top Surface | 6,113 Sq. Yds. |
| 5 inch Concrete Base..... | 813 Sq. Yds. |

| | |
|--------------------------------------|----------------|
| Concrete Gutters and Driveways | 300 Sq. Yds. |
| Concrete Curbing | 1,820 Lin. Ft. |

| | |
|-----------------------------|----------|
| Black Base | 662 Tons |
| Resetting Catch Basins..... | 7 |
| New Catch Basins..... | 5 |

Widening and Resurfacing with Alabama Rock, 2 inch top; Kentucky Rock, 1½ inch top; Sheet Asphalt, 1½ inch top, 1½ inch binder, or Warrenite Bitulithic, 2 inch top (in competition)

| | |
|-------------------------------------------------|-----------------|
| Springhill Ave., Bayou to Ann Top Surface | 26,000 Sq. Yds. |
| 5 inch Concrete Base..... | 25,000 Sq. Yds. |

| | |
|--------------------------------------|----------------|
| Concrete Gutters and Driveways | 1,500 Sq. Yds. |
| Concrete Curbing | 560 Lin. Ft. |

| | |
|-----------------------------|----------|
| Black Base | 100 Tons |
| Resetting Catch Basins..... | 10 |
| New Catch Basins..... | 50 |

Widening and Resurfacing with Alabama Rock, Kentucky Rock, Sheet Asphalt or Warrenite Bitulithic (in competition)

| | |
|---------------------------------------------------------------------------------------------|----------------|
| St. Emanuel St., Government to Church 2 inch Top Surface, except Kentucky Rock, 1½ inch.... | 1,600 Sq. Yds. |
| 5 inch Concrete Base..... | 350 Sq. Yds. |

| | |
|--------------------------------------|--------------|
| Concrete Gutters and Driveways | 250 Sq. Yds. |
| Resetting Granite Curbing.... | 720 Lin. Ft. |

| | |
|------------------------|--------------|
| Concrete Curbing | 100 Lin. Ft. |
| Black Base | 150 Tons |

| | |
|-------------------------|---|
| Catch Basins Reset..... | 2 |
| New Catch Basins..... | 2 |

Plans, Profiles and Specifications are on file in the office of the CITY ENGINEER and can be seen on application.

The right is reserved to reject any or all bids.

CECIL F. BATES,
Mayor.

WRIGHT SMITH,
City Engineer.

S. H. HENDRIX,
City Clerk.

Bids close December 4, 1928.

Court House and Jail

MARTIN COUNTY

Stuart, Fla.

Notice is hereby given that sealed bids will be received by Martin County, State of Florida, by its Board of County Commissioners at the Court House at Stuart, Florida, until 11 o'clock A. M. December 4th, 1928, for the erection of a Court House and County Jail combined, according to the plans and specifications prepared therefor by Bert D. Keck, A. I. A. Architect, Stuart, Florida, said plans and specifications being numbered Plan No. 4680. Ten copies of said plans and specifications will be available after November 26th, 1928. One copy will be on file at the office of the County Clerk; one copy will be on file at each of the following Builders' Exchanges: Builders' Exchange, 19 Damatis Arcade, West Palm Beach; Jacksonville Builders' Exchange, Suite 1427 Lynch Building, Jacksonville; Tampa Builders' Exchange, 206 South Franklin Street, Tampa, Florida, and Miami Builders' Exchange, 37 N. E. First Avenue, Miami, Florida; also at the office of Bert D. Keck, Architect, 354 Hibiscus Boulevard, Stuart, Florida.

The four additional sets of plans will be given out to Contractors for their individual use by making application to the Architect and depositing a certified check or cash in the sum of Fifty Dollars (\$50) as a guarantee of good faith and the safe return of the

plans and specifications on the date of receiving bids. These plans will be given out in the order as applications are received. The said \$50 deposit will be returned when said plans have been returned in good condition.

Should there be more applications for plans than available for Contractors who desire to have a copy of said plans and specifications for their own individual use, arrangements may be made with the Architect, if notice is received before November 26th, and a special set of plans and specifications will be furnished. A deposit of \$50 by certified check or cash, of which \$20 will be returned when plans and specifications are returned on date of receiving bids, the balance retained by the Architect for cost of producing extra sets of plans and specifications.

Proposals forms on which bids are to be made are in said specifications. This form shall not be removed, but copy same or a copy may be secured by applying to Architect, and said bids must be made in strict conformity to said requirements and no other form will be considered.

Each bid must be accompanied by a certified check or a satisfactory bid bond in an amount equal to five (5%) per cent of the total of the bid, made payable to J. R. Pomeroy, County Clerk, as a guarantee of good faith that, if awarded the contract, bidder shall enter into a uniform written contract and furnish an approved Surety Bond for the full amount of the contract

price. Said bond to be furnished within five days after being notified of the acceptance of the bid or forfeit said certified check or the amount of bond as liquidated damages to Martin County, Florida. Bids will be received on the following:

- (a) General contract for the building and alternate propositions.
- (b) Heating System.
- (c) Plumbing System.
- (d) Electric Wiring, etc.
- (e) Electric Elevator.
- (f) Jail Cell Work.
- (g) Sterilizing Plant.

Otherwise as provided in said specifications. The Martin County Board of County Commissioners reserve the right to accept any proposal or reject all proposals as they deem necessary in the best interests of Martin County.

It is understood that Martin County shall not be obligated in any way to any bidder unless proposal is accepted and contracted. It is further understood that for the construction of the building referred to hereto the Contractor is to be paid in County warrants.

By order of Board of Commissioners, Martin County, State of Florida, November 7th, 1928.

W. B. TILTON,
Chairman.

J. R. POMEROY,
Clerk.

Attest:
BERT D. KECK,
Architect.

CLASSIFIED OPPORTUNITIES

MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES

WILL SELL or Lease Blackmon Gold Mine, situated in Lancaster County, South Carolina. Interested parties are requested to communicate with me.

J. H. HEGLER, Kershaw, S. C., R. No. 3.

FOR SALE OR LEASE—Finest deposit of high-grade Brick, Tile or Terra Cotta clays in the Southeast; about 3,000,000 tons. Located near two railways and deep water a few miles from City of Savannah, Ga. Location ideal for Florida and coastwise trade. Property thoroughly prospected; laboratory tests, reports and samples available. The only high-grade Clear Buff burning plastic clay known in the Southeast. For further information apply to T. A. McAllister, 353 Telfair St., Augusta, Ga.

MANGANESE DEPOSITS

FOR SALE—Mineral options on 800 acres of rich manganese deposits, together with 2 mines, ore from the one mine testing: Silica, 5.80%; manganese dioxide, 89.28%. Option on this mine expires January 13, 1929. This property is located 10 miles from B. & O. Ry. and 8 miles from Southern Ry.; 80 miles to wharf. Owner of said options reserves the right to reject any offers. If interested notify at once.

MRS. EDNA W. CAPP, Strasburg, Va.

GRANITE QUARRY

GEORGIA GRANITE QUARRY For Sale—One of the finest quarries in the State of Georgia. Free from iron and especially adapted for monumental and building purposes. Used in many Postoffice Buildings throughout the South. Write

STEVE A. WELLS, Administrator,
C. T. Wells Estate, Stone Mountain, Ga.

LIMESTONE

FOR SALE OR LEASE—Limestone near San Antonio, Tex., on S. A. & A. P. Ry. This stone is suitable for all building purposes. Ideal location for crusher plant, pipe plant or cement plant. One location of this stone good for jetty work. For further information write G. R. BACHMAN, 307 Spring Street, New Brookland, S. C.

TIMBER AND TIMBER LAND

FOR SALE IN FEE SIMPLE.

Fourteen thousand acres of fine timber land in small or large boundaries, direct from owner at reduced price. Including oak, poplar, pine, chestnut, etc. Box 386, North Wilkesboro, N. C.

Rates, Terms and Conditions

RATES: 30 cents a line each insertion. Minimum space accepted, four lines. In estimating the cost allow six or seven words of ordinary length to a line. When the advertisement contains a number of long words proper allowance should be made.

Rates for Special Contract:

100 lines 25c a line
300 lines 25c a line
500 lines or more 25c a line

TERMS: For transient advertising cash with order; check, postoffice or express money order or stamps accepted.

On special contract advertising, bills are rendered monthly covering space used each month, payable within ten days.

CONDITIONS: No patent medicine, oil or mining stock advertisements or questionable or undesirable advertisements will be accepted. The assistance of our readers in excluding undesirable advertisements is requested. No display type used.

FARM, FRUIT AND TRUCK LANDS

ARKANSAS

ARKANSAS AGRICULTURAL LAND 1640 acres, all in a body, partially improved; one of the finest tracts of agricultural land in the country. No rock, brakes or gulches; 95% of entire tract is cultivable and can be made to produce abundantly. Located six miles from Monticello, county seat of Drew County, Arkansas. Direct highway connection with Monticello and the railroad. Title perfect and incontestable. Will lease tract from purchaser for a term of ten years at an annual rental of \$4000, payable on the first day of January of each year, and in addition will pay all taxes accruing against the tract during the ten-year period. All improvements made on the land by me are to become the owner's at the expiration of the lease. This is one of the safest of safe investments. Land will be worth twice the purchase price at the end of ten years. Price \$50,000 cash. For further particulars interested parties are invited to communicate with D. W. WATSON, 1183 Broad Street, Newark, New Jersey.

FARM, FRUIT AND TRUCK LANDS

FLORIDA

LAKE COUNTY—Beautiful 17 acre grove on large lake. Modern home and modern poultry buildings. All conveniences. Price \$25,000. P. B. RUGGLES, Groveland, Fla.

"TWENTY ACRES AND PLENTY"

FREE book tells truth about Florida land; monthly payments \$1.50 an acre; no interest; no taxes; sick benefit features.

SYLVESTER E. WILSON,
Department X,
Orlando, Fla.

FLORIDA is Calling you; get away from the long, cold Winter—come "where it's Summertime in the Wintertime and Pleasant all the year 'round." We still have some exceptional investment opportunities—especially in groves and Farms. Send for new Fall list. Tampa-West Coast Realty Co., Opp. P. O. "Since Before the War." Tampa, Florida.

13,000 ACRES, East Coast of Florida, on Indian River, Dixie Highway, F. E. C. Ry. Right in Orange growing belt, where groves sell fast to buyers all over country. Ideal for groves and sub-division. Price \$80.00 per acre. There's money in this tract for a man who knows how to develop.

30,000 ACRES, near Jacksonville, grazing and timber land. Reduced price \$11.00 A. S. P. LAMON, 323 N. E. First Street, Miami, Fla.

GEORGIA

FOR SALE or Trade on turpentine location, 590-acre farm, well located in Tift County, Georgia, two miles of shipping point, schools and churches; 350 acres in cultivation, mostly stumped; plenty of timber and water; 5 tobacco barns, good 6-room dwelling, deep well, 7 tenant houses, good farm for general farming and stock raising. For particulars write F. L. Underwood, Ty Ty, Ga.

LOUISIANA

BEAUTIFUL, fertile tract of 33 acres, 20 acres open, five miles from city, near Baton Rouge Golf and Country Club, 800 feet from New Orleans paved highway; 300 pecan, pear, plum and persimmon trees three years old. Ideal home site in beech and magnolia grove. Price \$10,000. Reference: Horticultural Department, State University. G. C. HUCKABY, Box 1230, Baton Rouge, La.

FARM, FRUIT AND TRUCK LANDS

MARYLAND

300-ACRE FARM—Large lawn, house and outbuildings, 5-acre pear orchard; fine elevation, near head of Chesapeake Bay, Cecil County, Md. Mostly hard roads; fine summer home. \$10,000, one-half cash. JAS. GANN, St. Georges, Del.

MISSISSIPPI

HAVE YOU HEARD ABOUT the "Cow Country" of Mississippi? It is filling up with progressive dairymen and poultry and hog raisers. I deal exclusively in small farms from 40 acres to 500 acres in each. As a special offering look this over! It is a good buy "sight unseen": 340 acres 5 miles from Ackerman, Miss., a county seat; 40 acres in cultivation, one four-room house, good well, running spring water all the year, 1 mile off a State highway, near Consolidated high school. Whole milk plant, creamery, poultry market, hog market; in the sweet potato country; 10 acres in sweet potatoes will pay for this place first year. Belongs to a large lumber company, who have cut off merchantable timber and want to sell land. For Cash will take \$1800. No, this is not a mistake; \$1800. J. S. SAVAGE, Box 147, Ackerman, Miss.

OKLAHOMA

600 ACRES, Adair County, Okla., splendid for sheep or cattle. Fine grape or berry land, good water, close to State Highway; ideal climate. Partly improved; \$7 per acre. One-half cash. Write or telephone JOHN CARUTHERS, Okmulgee, Oklahoma.

TEXAS

SACRIFICE—2000-acre fertile valley ranch near Houston, Texas; good terms, 6% interest.

Box 866, Port Arthur, Texas.

VIRGINIA

OLD VIRGINIA ESTATE, delightful sporting section. Quail in abundance; some deer and turkeys. Manor house, 14 rooms, built in 1794. Good as new; 250 acres. A rich farm on Federal highway. \$26,000; account old age. W. T. BAILEY, Suffolk, Va.

GULF COAST PROPERTY

MISSISSIPPI GULF COAST. 200x400 feet; full riparian rights. Situated in midst of Edgewater Development Company's holdings about 700 feet west of Two Million Dollar Edgewater Gulf Hotel. Can be bought outright or leased for ninety-nine years. Terms very reasonable. W. E. Stewart, M. D., 402 Tribune Bldg., Terre Haute, Ind.

BUSINESS OPPORTUNITIES

INTERNAL COMBUSTION ENGINE

For Sale outright or will enter into a contract to manufacture and sell a new type, very simple design, internal combustion engine, patented in U. S. A. and Canada. Address ROY MIDGLEY, Orlando, Fla.

FOR SALE—AN OLD SAWMILL TOWN ON A NEW TRUNK LINE RAILROAD

The Town of Muscogee, Escambia Co., in extreme West Florida, 22 miles northwest of Pensacola, on the recently completed extension of the FRISCO SYSTEM to the Gulf at Pensacola.

The best location for a permanent town between Pensacola, Fla., and Atmore, Ala., a distance of 54 miles.

As this sale is for liquidation purposes, it must be sold as a whole and for cash only.

The offering includes 2351 acres of land, hotel, 50 substantial dwellings for whites, 50 quarters for colored, store building, office building, warehouses and 4½ miles of side tracks to former plant sites. In the town, but not included in the sale, are Public Schools and Churches.

Muscogee was one of the most important sawmill towns in West Florida for 50 years. In the matters of good water, healthfulness, topography, railroad facilities and good roads Muscogee has outstanding advantages for permanent development along industrial and agricultural lines.

All for the dead-low sum of \$30,000 cash. INVESTIGATE in person or communicate with SOUTHERN STATES LUMBER CO., Owners, Pensacola, Florida.

BUSINESS OPPORTUNITIES

WE OFFER for sale: Control splendid bank in a prominent Texas city. Also an excellent department store with clean stock and growing business. Edwin McKellar, Austin, Tex.

WILL GIVE selling rights in exclusive territories for representatives desiring to establish themselves in Oil Burner business. Proposition offers exceptional opportunities to right men. Dial Oil Burner Co., Atlanta, Ga.

TO MANUFACTURERS

An established Corporation engaged in Reorganizations, Construction, Financing and Management, substantial enterprises, United States and Latin America, now organizing for its own account a Sales Department and interested in extending its sale services to manufacturers. Headquarters, New Orleans. Address communications to P. O. Box 867, New Orleans, La.

COMPRESSING THIN SHELL fireproof cement tile that's poured (cast) in heated, patented machine (heat evaporates water) greatly improves quality. We have compressed tile, 8x12x12, weight 35 lbs., made with various mixtures from 1-5 to 1-18, which prove safety for load and non-load bearing use at average cost of 5c. (The Government used 1,000,000.) For territory rights and machines to make 4 to 40 tile per cast in 2 to 5 minutes, of various sizes, write THE PAULY COMPANY, 1331 K, N. W., Washington, D. C.

INDUSTRIAL SURVEYS

ENGINEERING REPORTS on resources of cities and towns. Recommendations for industrial development made by specialists in locating industries.

TECHNICAL SERVICE COMPANY
Woolworth Building New York City

HOTEL FOR SALE

BRICK HOTEL, 18 rooms, two-story, steam heat, on main highway and corner lot. Across from Frisco Depot, Sikeston, Mo. Will consider good farm or smaller property.

MAGEE & ORR.
812-813 Fidelity Bank Building,
Memphis, Tennessee.

INDUSTRIES WANTED

DO YOU WANT TO LOCATE in a live city—1200 population. Five hundred unemployed women within a fifteen-minute distance. Cheap power. Good roads. Will invest and give you a site. CHAMBER OF COMMERCE, Ball Ground, Ga.

INDUSTRIAL PLANTS

FOR SALE—Paint mfg. plant, capacity 1500 gal. daily; an opportunity for the right party with some experience. Address Owner, 2921 El Prado Blvd., Tampa, Fla.

WRITE FANTUS for factories anywhere. Wonderful values in buildings or equipped plants. Valuable industrial sites free of cost to established industries. For America's best buys, address Fantus Factory Locating Service, 139 North Clark Street, Chicago.

SOUTHERN COTTON MILL

For Sale
8000 SPINDLES
GOOD WATER POWER
Address
F. C. ABBOTT & COMPANY,
201 Johnston Building, Charlotte, N. C.

FACTORY BUILDINGS

MODERN BRICK FACTORY BUILDING ready for immediate occupancy. Sprinkler system, steam heating, wired for electric power. Within few hundred feet three trunk line railroads. 60'x150'; 9000 square feet of floor space. Will rent or sell. Write BOX 289, GADSDEN, ALABAMA.

FACTORY SITES

IDEAL SITE for manufacturer Jacksonville, Fla.; 175 feet railroad frontage. Southern Express, Armour; 21 other corporations located on same street. Priced right.

W. N. SMITH,
2978 Riverside Ave., Jacksonville, Fla.

GEORGIA INDUSTRIAL SITE

360 Acres, with 3000 feet railroad frontage, 7 miles from business center of Atlanta, Georgia. Taxes exempt for 5 years on new industrial plants. For description, etc., address H. H. ARNOLD, 208 Grant Building, Atlanta, Ga.

CANANDAIGUA, NEW YORK—Situated in Western New York at terminus of Pennsylvania Railroad, on New York Central Railroad; connection with Lehigh Valley six miles away; accessible to Barge Canal and Lake Ontario. Factory sites available, with railroad sidings. Some locations free, others at moderate cost. Labor reasonable. Send for Daily Messenger's 130th Anniversary Edition, containing eighty pages of news that will be of interest to all manufacturers. Communicate with RICHARD DEWITT, Factory Department, The Daily Messenger, Canandaigua, New York.

PATENT ATTORNEYS

FREE "PATENT PARTICULARS"

Sterling Buck, over 21 years Registered Patent Attorney. Prompt and thorough services. Suite M, 629 F, Washington, D. C.

PATENTS—Booklet free. Highest references. Best results. Promptness assured. WATSON E. COLEMAN, Patent Lawyer, 724 Ninth St., N. W., Washington, D. C.

PATENTS—TRADEMARKS—COPYRIGHTS Charlotte office convenient to South. PAUL B. EATON, Registered Patent Attorney, 218 Johnston Building, Charlotte, N. C., and 903 Grant Place N. W., Washington, D. C.

BRANCH OFFICE SERVICE

WASHINGTON, D. C.—Representation in Washington by former high Government Official is most advantageous for business concerns desiring Government business or having business before Government Departments. Personal representation given to all subjects. Clientele limited to non-conflicting activities. Terms consistent with service to be rendered. LOUIS A. HILL, 3620 Sixteenth Street, N. W., Washington, D. C.

REPRESENTATIVES WANTED

AN EXCELLENT OPPORTUNITY, with unlimited financial possibilities, either as direct Salesmen or as Sales Representatives, is offered for the following territories: No. Carolina, So. Carolina, Georgia, Alabama, Indiana and the Cleveland, Pittsburgh and Cincinnati territories, covering a complete line of Vacuum, Vapor and Steam Heating Specialties, a complete system of Temperature Regulation, Fans, Air Washers and Unit Heaters. Only those with technical education and thoroughly experienced in one or more of the lines will be considered. Give complete history of selling experience, with reference to territory covered, name of company now associated with, etc. Applications confidential. THE BISHOP & BABCOCK SALES CO., Cleveland, Ohio.

SITUATIONS WANTED

ACCOUNTANT—Twenty years' public, manufacturing and utility experience; costs, statistics, collections, etc. Capable manager for office with twenty workers. Protestant, age 40, married; available soon; moderate salary. Address No. 6992, care Manufacturers Record, Baltimore, Md.

ACCOUNTING executive desires connection with progressive industrial organization as Auditor or Comptroller. Six years' experience in public accounting and income tax work. Five years' experience with wholesale trading concern in Atlanta, Ga. Certificate issued by State Board of Accountancy of Florida in April, 1927. Address P. O. Box 702, Miami, Fla.

SITUATIONS WANTED

POSITION WANTED—By experienced man, now selling to cotton mills in N. C., S. C., Ga. and Ala. Can show you I am a producer if you have what my mill friends want. Address No. 6983, care of Manufacturers Record, Baltimore, Md.

SALESMAN AND ESTIMATOR—Desire position as factory representative for a building specialty nationally known. Am in touch with builders and architects of Baltimore and Washington, also architects of the Government. Drawing account and commission. Address No. 6993, care Manufacturers Record, Baltimore, Md.

INDUSTRIAL MANAGER or assistant available for industrial corporation or Chamber of Commerce. Management, organization, operation, engineering, economics, one or more plants. Technical graduate, 35; good executive, personality, initiative. Address No. 6990, care Manufacturers Record.

SITUATIONS WANTED

GRADUATE CIVIL ENGINEER, 30, married, 6 years' experience surveys, estimates, construction, property location, subdivision and descriptions, title investigations, desires position with corporation, syndicate or capitalists considering development work in South. Investigation of record invited. Address No. 6991, care Manufacturers Record.

MEN WANTED

SALESMAN WANTED—Our proposition offers greater earning possibilities to the real salesman than is offered to him in most any other line. A credit and collection service with a bonded recovery obligation. American Security Credit Company, General Offices, St. Louis, Mo.

MEN WANTED

IF YOU ARE OPEN to overtures for new connection and qualified for a salary between \$2500 and \$25,000, your response to this announcement is invited. The undersigned provides a thoroughly organized service, of recognized standards and reputation, through which preliminaries are negotiated confidentially for positions of the caliber indicated. The procedure is individualized to each client's personal requirements; your identity covered and present position protected. Established nineteen years. Send only name and address for details.

R. W. BIXBY, INC.,
103 Downtown Bldg. Buffalo, New York.

HAULING

HAULING CONTRACT WANTED—Road material by yard, batch or ton mile. Also hauling of excavations. No job too large. C. C. MAY, Box 36, Inskip, Tenn.



SPECIAL ADVERTISEMENTS OF GENERAL INTEREST



We are specialists

in disposing of complete textile plants and removal of units to other locations. We have a background of varied experience in

**Mill Liquidation
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We handle large and small transactions.
Consult with us.

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NEW YORK CITY

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MURray Hill 4755

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BOSTON, MASS.

Telephone
Liberty 5948

Concrete Mixer Dealers and Representatives Wanted

Dealers who are looking for new lines and desiring to change from old ones will find an exceptionally attractive proposition available in a complete, new up-to-date line of concrete mixing machines, consisting of small, medium and large sizes, tilting and non-tilting types, which sell at popular prices competing with all other lines and having new and up-to-date features, sturdy construction and designs that appeal to the user.

The manufacturer carries the stock for the dealer on long dating and gives personal sales help through their representatives, as well as special advertising campaigns for each dealer.

The name of the manufacturer may be secured by writing to this publication, stating territory covered and present lines handled. Address manufacturer:

A-461

Care of Manufacturers Record

Baltimore, Md.

FOR SALE

KINSTON COTTON MILLS KINSTON, N. C.

This mill is operated by steam, has 16,840 spindles—Howard & Bullough. Fully equipped to make from 8s to 30s High Grade Hosiery—and Underwear Yarns on cones, skeins and tubes, single and two ply. Production 40,000 to 45,000 pounds weekly. Plenty of labor.

Mill is located on A. C. L. and Norfolk-Southern railroads. Has 61 tenement houses close to mill. The local market practically supplies all cotton necessary.

This mill property offered for sale on easy terms.

KINSTON COTTON MILLS CO., Inc.
KINSTON, N. C.

MANUFACTURING SITE FOR SALE

In City of Charlotte, North Carolina, containing three acres with four inch supply of inexhaustible clear water. Plenty of electricity available.

C. M. CARSON, Owner

328 So. Tryon St.

Charlotte, N. C.

**IF YOU WANT TO GET—
Southern Business
Advertise in the
MANUFACTURERS RECORD**

TENNESSEE TRACK BOLTS and SPIKES



Made to withstand the shocks of modern traffic

TENNESSEE Rolled Thread Track Bolts and Cut Point Spikes are produced from bolt and spike rods of our own manufacture, giving us full control over the quality of the finished product.

THEY are subjected to rigid inspection at every step of the finishing processes to the end that each individual bolt and spike shall be right in every detail.

Product of
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Corporation

PRODUCTS

STANDARD & LIGHT RAILS
ANGLE BARS-TRACK BOLTS
TRACK SPIKES-TIE PLATES
BARS-PLATES-SHAPE
SHEETS-(BLUE ANNEALED
BLACK & GALVANIZED)
-AXLES-FORGINGS-
STEEL CASTINGS SEMI-
FINISHED MATERIAL
PIG IRON

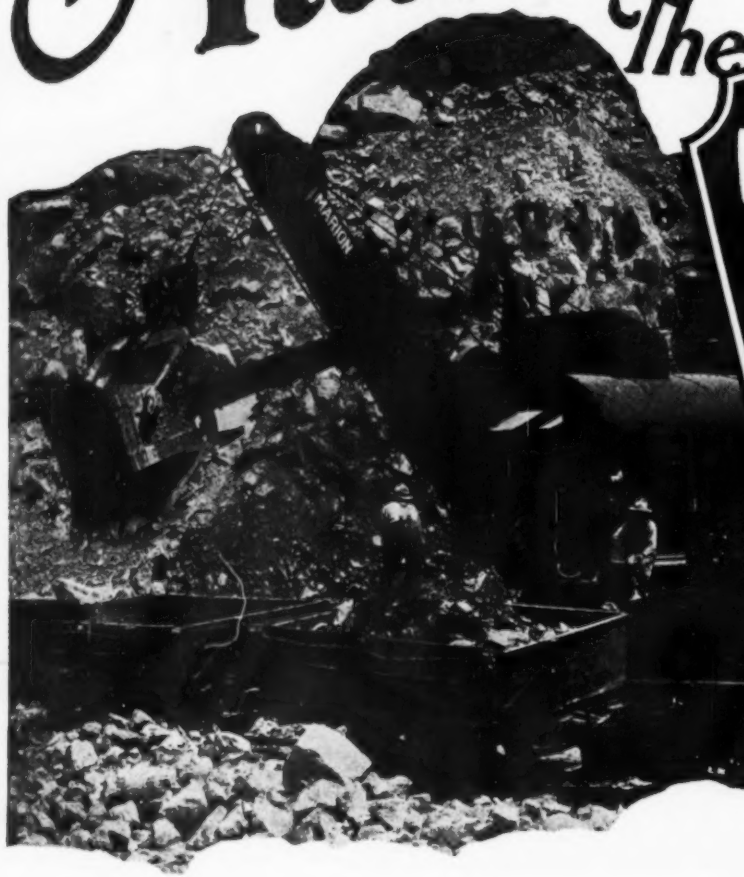
TENNESSEE COAL, IRON & RAILROAD COMPANY

GENERAL OFFICES
Brown-Marx Building
BIRMINGHAM, ALABAMA

DISTRICT OFFICES

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CHICAGO-CINCINNATI
CLEVELAND-DENVER
DETROIT-NEW YORK
NEW ORLEANS-ST. LOUIS
ST. PAUL-PITTSBURG
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Announcing *The*



Type 480

Steam & Electric

*A new and improved 2-yard Shovel to
supersede the Type 37*

THE Type 480 has been made possible by the experience gained from more than 500 Type 37s in actual service. In the Type 480 Marion has incorporated the desirable features of the 37 together with additional strength and refinement to meet the rigid present day requirements for heavy service, high capacity and long life.

It is truly a Marion Shovel and includes the distinctive Marion features of enclosed crawlers, outside type boom, inside dipper handle and triple hitch — all proved points which result in high yardages, decreased maintenance and lower unit operating costs.

Send for further information on this new and improved shovel.

THE MARION STEAM SHOVEL COMPANY
MARION, OHIO, U. S. A.

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MARION

